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SANITARY SEWER REPORT

Lauriston Park Block 124, Lot 31 Borough of Rumson Monmouth County, NJ

Prepared For: **Yellow Brook Property Co., LLC** 247 Bridge Ave., Suite 5 Red Bank, NJ 07701

> September 2021 FPA No. 15053.003

INTRODUCTION

The subject property is located at 91 Rumson Road in the Borough of Rumson, Monmouth County, New Jersey and is known as Block 124, Lot 31. The following Sanitary Sewer Report has been prepared for the Lauriston Park Residential Development. This report provides a description of the existing site condition, a description of the proposed development, an overview of the Osprey Lane Sanitary sewer system, an overview of the inspection and repair services that were performed on the Osprey Lane system, the projected sanitary sewer demand, an analysis of the development impact along with a closing statement.

EXISITNG SITE CONDITIONS

The site is currently developed as a single-family residential use and includes a two and a half-story residential dwelling, access driveways, patios, porches and a detached garage. The property has site frontage along Rumson Road, Tuxedo Road and Osprey Lane (*See Below*).



The residential dwelling is served by a sanitary sewer lateral that connects to the Borough of Rumson sanitary sewer system.

PROPOSED DEVELOPMENT

The property was subject to an affordable housing settlement agreement which rezoned the property to permit the development of up to 14 residential dwellings.

In accordance with the settlement agreement and the Rumson Road Housing District zone, the applicant is proposing to construct 14 residential dwellings that will be located within six building units. The residential development will consist of two triplex buildings, two carriage homes and two duplex units. Each dwelling will have three-bedrooms and will be served by a new sanitary sewer main that will be extended from the existing main located within Osprey Lane into the subject property.

BOROUGH SANITARY SEWER SYSTEM IN OSPREY LANE

An existing 8-inch clay sanitary sewer main is located within the Osprey Lane right-of-way and extends south to the intersection with Shrewsbury Drive. From there, the main increases to a 12-inch clay main and extends east along Shrewsbury Drive to a lift (pump) station located at the corner of Avenue of Two Rivers South *(See Below)*.



Our office had met with the Borough's Department of Public Utilities and the Borough Engineer to discuss the proposed development and the connection to the sanitary sewer system within Osprey Lane. The DPU and Borough Engineer confirmed that the existing system is a gravity main

that extends from Osprey Lane to the lift (pump) station at the intersection of Shrewsbury Drive and Avenue of Two Rivers South. It was noted that the lift station receives heavy loading during the wet season (February through May) and times of high groundwater fluctuations. The Borough Engineer indicated that the Borough engaged the services of a sewer maintenance contractor to perform a video inspection of several sanitary sewer mains throughout the Borough. The inspection revealed that these mains encountered occasional increase in flow from fluctuating groundwater that enters the system through pipe joint failures or cracks. The Borough authorized the contractor to grout the areas of observed pipe failure and open joints. The Borough Engineer indicated that since the grout operation was performed in these mains, there has been a noticeable decrease in flow within the system.

VIDEO INSPECTION AND GROUT REPAIR OF THE OSPREY LANE SYSTEM

As discussed above, the Borough indicated that the Osprey Lane sanitary sewer main experiences periodic fluctuations in flow. The applicant, Yellowbrook Property Company (YPC), offered to engage the services of a sewer maintenance contractor, Oswald Enterprises, to perform a video inspection of the Osprey Lane main similar to what was previously done by the Borough in other sections of the municipality.

Oswald Enterprises was retained by YPC to clean and inspect the sanitary sewer main from Osprey Lane to the pump station, and in addition, repair any joint failures or cracks that are encountered. The approximate length of main that was inspected and repaired is approximately 2,590 linear feet of pipe.

Prior to advancing the video inspection, the main (pipe) needs to be cleaned of all debris. In order to clean the pipe, Oswald begins at the upstream manhole structure and introduces a high volume of water into the main to flush out any trapped or standing debris. A vac-truck is stationed at the next downstream structure where the truck lowers a large vacuum hose into the manhole to collects the debris that is forced from the upstream manhole. This is process is repeated between each manhole structure until they reach the lift station.

Once the main is cleaned, the service company lowers a small four-wheeled robot into the first upstream manhole structure. The robot has a video camera mounted to its frame and the robot is advanced down the pipe. An inspector is stationed at the road elevation and observes the video as the robot proceeds down the pipe. Any cracks, open joints, failures, etc. that are encountered are noted in the video and log sheet. YBC also authorized Oswald to apply chemical grout to seal any cracks or open joints that were found. The inspection and grouting operations were continued along the entire main to the lift station. Upon completion of their services, a report was generated noting the pipe defects, the location in the pipe, the size of the defect, and the amount of grout applied to remedy the failure. A copy of this report can be found in *Appendix A*.

PROJECTED SANITARY SEWER DEMAND

The following describes the projected sanitary sewer flow for the proposed development as per N.J.A.C. 7:14A-23.3.

Existing Conditions

The property is developed and includes a 2 ½ story 6 Bedroom single family dwelling: Residential Dwellings – Single Family Home

3 Bedroom Unit or Larger - 300 Gallons Per Day (GPD)

 $Q_{existing} = 1 \times 300 GPD$

Q_{existing} = 300 GPD

Proposed Conditions

The proposed development includes 14 residential units:

Residential Dwellings - Single Family Home, Duplexes, Townhouses

3 Bedroom Unit or Larger - 300 Gallons Per Day (GPD)

 $Q_{proposed} = 14 \times 300 GPD$

Qproposed = 4,200 GPD

Net Increase

The increase in post development sanitary sewer flow is:

 $Q_{increase} = Q_{proposed} - Q_{existing}$

 $Q_{increase} = 4,200 GPD - 300 GPD$

Q_{increase} = 3,900 GPD

DEVELOPMENT IMPACT ANAYLSIS

Our office provided a copy of the Oswald report to the Borough Engineer for his review and files

at the completion of the video inspection and grouting services that were engaged by YPC

(Appendix A).

We contacted the Borough Engineer to discuss the findings, the repairs performed and the

proposed development flows. The Borough Engineer indicated that the conditions encountered,

and the repairs performed, were similar to other inspections and repair projects that the Borough

had advanced previously. The Borough Engineer provided us with data from a previous grouting

operation that was advanced at the Riverside Drive sewer main, which resulted in a net flow

reduction of 7.19 gallons per liner foot of pipe (See Appendix B).

In review of the Oswald report for the Osprey Lane and Shrewsbury Drive sanitary sewer main,

2,590 linear feet of pipe was cleaned, inspected and repaired. Utilizing the data provided by the

Borough Engineer relating to the flow reduction exhibited on the recent Riverside Drive project

of 7.19 gallons per linear foot, we reduced this number by half as a conservative approach. Using

a flow reduction of 3.60 gallons per foot and a total main length of 2,590 linear feet, the flow

reduction that would be expected in this main is approximately 9,300 gallons per day (GPD).

CLOSING

The reduction in flow from the inspection and grouting operations that were advanced within

this system will provide a net benefit to the Borough's sanitary sewer main and lift station and

will offset the proposed development flow of 3,900 GPD, resulting in a net decrease in flow in

the Borough's sanitary sewer system of approximately 5,400 GPD.



Oswald ENTERPRISES, INC.

YELLOW BROOK PROPERTY COMPANY 247 BRIDGE AVENUE RED BANK, NEW JERSEY 07701

DVD 1
T.V. INSPECTION AND CHEMICAL GROUTING
OF VARIOUS SANITARY SEWER LINES
OSPREY LANE, RUMSON

AUGUST 5 AND 6, 2021

OSWALD ENTERPRISES, INC. 161 EAST ROAD - P.O. BOX 126 BELFORD, NEW JERSEY 07718

Main Office: 161 East Road, P.O. Box 126, Belford, New Jersey 07718 Phone: 732-787-1436 • Fax: 732-495-4990 www.OswaldEnt.com



Main Inspections Small Photos

Mainline ID:

City:

Address:

Project name:

RUMSON OSPREY LN 89

RUMSON NJ

OSPREY LN

8/5/21 RUMSON OSPREY

LN

Start date/time:

Asset length:

Weather:

Operator:

8/5/2021 8:12 AM

404.8 ft.

Dry

John Read

Upstream node:

Depth US:

Downstream node:

89

TO 88

88

Depth DS:

Pipe shape:

Pipe material:

Pipe height:

Pipe width:

Circular

Clay ESVP

8.0 in.

Comments:

Distance	Dir.	Length	From/To	Code	Modifier/Severity Rating Comments
8.1 ft.	D	1.2 ft.	6 /	Crack Joint	Longitudinal
8.6 ft.	D		1	Infiltration	Crack Runner
13.1 ft.	D	i i jara, kiri i jama, manutus (jama, kiri a	1	Joint - Infiltration	Weeper
24.1 ft.	D		12 /	Lateral	
25.7 ft.	D	a garater traditions can be traded	1	Joint - Infiltration	Weeper
30.7 ft.	D		1	Infiltration	Crack Weeper
30.7 ft.	D	0.9 ft.	7 /	Crack Joint	Longitudinal
37.4 ft.	D		9 /	Lateral	Capped
48.0 ft.	D		1	Infiltration	Crack Runner
48.0 ft.	D	1.0 ft.	7 /	Crack Joint	Longitudinal
58.1 ft.	D	1.1 ft.	5 /	Crack Joint	Longitudinal
58.4 ft.	D		1	Infiltration	Crack Weeper

Distance	Dir	Length	From/T	o Code	Modifier/Severity Rating Comments
68.3 ft.	D		1	Joint - Infiltration	Weeper
68.3 ft.	D	1.6 ft.	12 /	Crack Joint	Longitudinal
73.5 ft.	D		1	Infiltration	Crack Weeper
73.5 ft.	D	1.7 ft.	2 /	Crack Joint	Longitudinal
136.8 ft.	D	1.1 ft.	9 /	Crack	Longitudinal
140.5 ft.	D		I	Joint - Infiltration	Runner
140.5 ft.	D	0.0 ft.	2 /	Crack Joint	Longitudinal
223.2 ft.	D	3.9 ft.	3 /	Crack	Longitudinal
279.2 ft.	D		12 /	Lateral	
285.9 ft.	D		1	Joint - Infiltration	Weeper
331.8 ft.	D	0.9 ft.	1 /	Crack Joint	Longitudinal
348.1 ft.	D	1.0 ft.	9 /	Crack Joint	Longitudinal
352.3 ft.	D	1.4 ft.	9 /	Crack Joint	Longitudinal
363.1 ft.	D		1	Joint - Infiltration	Runner
363.1 ft.	D	1.0 ft.	3 /	Crack Joint	Longitudinal
368.3 ft.	D	1.0 ft.	3 /	Crack Joint	Longitudinal
383.8 ft.	D	1.0 ft.	1	Crack Joint	Longitudinal
399.2 ft.	D		1	Joint	Other
404.8 ft.	D		1	Inspection	End

Inspection's photos

Main Inspections Small Photos

Mainline ID: City: Address: Project name:

RUMSON OSPREY LN 88 RUMSON NJ OSPREY LN

TO 87

Start date/time: Asset length: Weather: 8/5/2021 9:14 AM 407.0 ft. Dry

Upstream node: Depth US: Downstream node:

87

Pipe height: Pipe shape: Pipe material:

Circular Clay ESVP 8.0 in.

Comments:

88

8/5/21 RUMSON OSPREY

LN

Operator: John Read

Depth DS:

Pipe width:

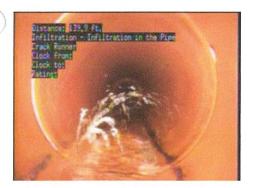
Distance	Dir.	Length	From/To	Code	Modifier/Severity Rating Comments
4.3 ft.	D		1	Joint	Other
10.3 ft.	D		1	Joint	Other
36.3 ft.	D		12 /	Lateral	
99.2 ft.	D	1.7 ft.	3 /	Crack Joint	Longitudinal
109.4 ft.	D	2.4 ft.	6 /	Crack Joint	Longitudinal
114.4 ft.	D	1.1 ft.	2 /	Crack Joint	
125.7 ft.	D		1	Joint - Infiltration	Weeper
125.7 ft.	D	1.0 ft.	9 /	Crack	Longitudinal
129.9 ft.	D	1.0 ft.	1	Crack Joint	Longitudinal
134.9 ft.	D		1	Joint - Infiltration	Stain
139.9 ft.	D	1.0 ft.	7 /	Crack Joint	

Distance Dir. Length	From/To Code	Modifier/Severity	Rating	Comments

139.9 ft. D

/ Infiltration

Crack Runner



151.0 ft.	D		12 /	Lateral		
191.6 ft.	D		1	Crack	Circular	
343.1 ft.	D	1.0 ft.	10 /	Crack Joint	Longitudinal	
403.3 ft.	D	1.0 ft.	7 /	Crack Joint	Longitudinal	
407.0 ft.	D		1	Inspection	End	

Inspection's photos

Main Inspections Small Photos

Mainline ID: City: Address: Project name:

RUMSON OSPREY LN 87 RUMSON NJ OSPREY LN 8/5/21 RUMSON OSPREY

TO 85

Start date/time: Asset length: Weather: Operator: 8/5/2021 10:40 AM 396.3 ft. Dry John Read

Upstream node: Depth US: Downstream node: Depth DS:

87

85

LN

Pipe shape: Pipe material: Pipe height: Pipe width: Circular Clay ESVP 8.0 in.

Comments:

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
5.3 ft.	D	1	Joint	Other		
11.3 ft.	D	1	Joint	Other		
67.2 ft.	D	1	Joint - Infiltration	Runner		
109.4 ft.	D	9 /	Lateral Defects	Mineral Deposit		



167.4 ft.	D	1	Joint - Infiltration	Runner
393.1 ft.	D	1	Joint	Other
396.3 ft.	D	1	Inspection	End

Inspection's photos

Main Inspections Small Photos

Mainline ID: Address: City: Project name:

RUMSON OSPREY LN 89 OSPREY LN

TO 88

Start date/time: 8/6/2021 7:49 AM 404.8 ft.

Upstream node:

89

Pipe shape:

Circular Comments: **RUMSON NJ**

Asset length:

Depth US:

Pipe material:

Clay ESVP

8.0 in.

Dry

88

Weather:

Pipe height:

Downstream node:

8/5/21 RUMSON OSPREY

LN GROUTING

Operator:

John Read

Depth DS:

Pipe width:

Distance	Dir. Length	From/T	o Code	Modifier/Severity Rating	Comments
1.9 ft.	D	I	Joint	Passed the air test	
8.4 ft.	D	1	Crack Joint		2 GALLONS
13.8 ft.	D	1	Joint	Is Now Sealed	1 GALLON
19.3 ft.	D	1	Joint	Passed the air test	·
25.4 ft.	D	1	Joint	Passed the air test	
26.1 ft.	D	1	Joint	Is Now Sealed	1 GALLON
32.2 ft.	D	1	Crack Joint	Is Now Sealed	1 GALLON
36.2 ft.	D	1	Joint	Passed the air test	
38.4 ft.	D	1	Joint	Passed the air test	
43.3 ft.	D	1	Joint	Passed the air test	
48.3 ft.	D	1	Joint	Is Now Sealed	3 GALLONS
53.6 ft.	D	1	Joint	Passed the air test	
59.5 ft.	D	1	Crack Joint	Is Now Sealed	2 GALLONS
65.2 ft.	D	1	Joint	Passed the air test	
69.4 ft.	D	1	Crack Joint	Is Now Sealed	1 GALLON
,					

Distance	Dir. Length	From/To		Modifier/Severity	Rating Comments
74.3 ft.	D	1	Crack Joint	Is Now Sealed	2 GALLONS
79.2 ft.	D	1	Joint	Passed the air test	
84.6 ft.	D	1	Joint	Passed the air test	
89.8 ft.	D	1	Joint	Passed the air test	
95.1 ft.	D	1	Joint	Passed the air test	
99.8 ft.	D	1	Joint	Passed the air test	
105.0 ft.	D	1	Joint	Passed the air test	
110.4 ft.	D	1	Joint	Passed the air test	
115.9 ft.	D	1	Joint	Passed the air test	
122.8 ft.	D	1	Joint	Passed the air test	
125.5 ft.	D	1	Joint	Passed the air test	
130.8 ft.	D	1	Joint	Passed the air test	
137.0 ft.	D	1	Joint	Passed the air test	
142.4 ft.	D	1	Crack Joint	Is Now Sealed	2 GALLONS
146.0 ft.	D	1	Joint	Passed the air test	
151.1 ft.	D	1	Joint	Passed the air test	
156.4 ft.	D	1	Joint	Passed the air test	
162.3 ft.	D	1	Joint	Passed the air test	
167.4 ft.	D	1	Joint	Passed the air test	
171.8 ft.	D	1	Joint	Passed the air test	
176.8 ft.	D	I	Joint	Passed the air test	
182.0 ft.	D	1	Joint	Passed the air test	

		Dir. Length	From/To		Modifier/Severity	Rating	Comments	
	187.4 ft.	D	1	Joint	Passed the air test			
	193.5 ft.	D	1	Joint	Passed the air test			
	197.9 ft.	D	1	Joint	Passed the air test	The Control of the Co		2000 Print 1 / A 444 MA - VI - VI - VI - VI
	202.4 ft.	D	1	Joint	Passed the air test			
	207.7 ft.	D	I	Joint	Passed the air test			
	213.9 ft.	D	I	Joint	Passed the air test			
	219.2 ft.	D	1	Joint	Passed the air test		<u> </u>	
	226.0 ft.	D	1	Joint	Passed the air test		State Control of the	
	228.3 ft.	D	1	Joint	Passed the air test			
	233.3 ft.	D	1	Joint	Passed the air test			
	239.2 ft.	D	1	Joint	Passed the air test	State division to the state of		
	244.8 ft.	D	1	Joint	Passed the air test	312-100-27-21-21-21-21-21-21-21-21-21-21-21-21-21-		***************************************
)	249.2 ft.	D	1	Joint	Passed the air test			
	254.2 ft.	D	1	Joint	Passed the air test			
	259.0 ft.	D	1	Joint	Passed the air test			Į.
	264.1 ft.	D	1	Joint	Passed the air test	,		
	269.3 ft.	D	1	Joint	Passed the air test			
	274.6 ft.	D	1	Joint	Passed the air test	*****		
	280.7 ft.	D	1	Joint	Passed the air test			
	281.5 ft.	D	1	Joint	Passed the air test			
	286.7 ft.	D	1	Joint	Is Now Sealed	To the second se	2 GALLONS	
	292.2 ft.	D	1	Joint	Passed the air test			

Distance	Dir. Length	From/To	Code	Modifier/Severity Rating	Comments
297.2 ft.	D	1	Joint	Passed the air test	
302.5 ft.	D	1	Joint	Passed the air test	
307.4 ft.	D	1	Joint	Passed the air test	
312.3 ft.	D	1	Joint	Passed the air test	
317.5 ft.	D	1	Joint	Passed the air test	
322.8 ft.	D	1	Joint	Passed the air test	
328.3 ft.	D	1	Joint	Passed the air test	
333.9 ft.	D	1	Crack Joint	Is Now Sealed	2 GALLONS
338.2 ft.	D	1	Joint	Passed the air test	
343.3 ft.	D	1	Joint	Passed the air test	
348.8 ft.	D	1	Joint	Is Now Sealed	1 GALLON
353.7 ft.	D	1	Crack Joint	Is Now Sealed	1 GALLON
359.4 ft.	D	1	Joint	Passed the air test	
364.4 ft.	D	1	Crack Joint	Is Now Sealed	2 GALLONS
368.4 ft.	D	1	Crack Joint	Is Now Sealed	1 GALLON
374.6 ft.	D	1	Joint	Passed the air test	
379.3 ft.	D	1	Joint	Passed the air test	***************************************
384.4 ft.	D	1	Crack Joint	Is Now Sealed	1 GALLON
389.6 ft.	D	1	Joint	Passed the air test	
394.8 ft.	D	1	Joint	Passed the air test	
399.7 ft.	D	1	Joint	Passed the air test	
399.8 ft.	D	1	Inspection	End	
V					

Inspection's photos

Main Inspections Small Photos

Address: Mainline ID: City: Project name:

RUMSON OSPREY LN 88 RUMSON NJ

Pipe material:

Clay ESVP

TO 87

Start date/time: Asset length: 8/6/2021 12:21 PM 407.0 ft. Upstream node: Depth US:

88

Pipe shape:

Circular

Comments:

OSPREY LN 8/5/21 RUMSON OSPREY

LN GROUTING

Operator:

John Read

Downstream node: Depth DS:

87

Dry

Pipe height:

8.0 in.

Weather:

Pipe width:

Distance	Dir. Length	From/To	Code	Modifier/Severity Rating Comments
4.2 ft.	D	1	Joint	Passed the air test
9.9 ft.	D	1	Joint	Passed the air test
15.1 ft.	D	1	Joint	Passed the air test
21.3 ft.	D	1	Joint	Passed the air test
25.2 ft.	D	1	Joint	Passed the air test
36.1 ft.	D	1	Joint	Passed the air test
37.4 ft.	D	1	Joint	Passed the air test
42.9 ft.	D	1	Joint	Passed the air test
48.6 ft.	D	1	Joint	Passed the air test
52.8 ft.	D	1	Joint	Passed the air test
58.2 ft.	D	1	Joint	Passed the air test
63.2 ft.	D	1	Joint	Passed the air test
68.2 ft.	D	1	Joint	Passed the air test
73.6 ft.	D	1	Joint	Passed the air test
79.7 ft.	D	1	Joint	Passed the air test

Distance	Dir. Length	From/T	o Code	Modifier/Severity Ra	ting Comments
85.5 ft.	D	1	Joint	Passed the air test	
88.8 ft.	D	1	Joint	Passed the air test	
93.8 ft.	D	1	Joint	Passed the air test	
99.0 ft.	D	1	Crack Joint	Is Now Sealed	2 GALLONS
104.4 ft.	D	1	Joint	Passed the air test	A Committee of the Comm
110.5 ft.	D	1	Joint	Is Now Sealed	1 GALLON
116.7 ft.	D	1	Joint	Is Now Sealed	1 GALLON
116.8 ft.	D	I	Crack	Is Now Sealed	1 GALLON
119.7 ft.	D	1	Joint	Passed the air test	
125.1 ft.	D	1	Joint	Is Now Sealed	1 GALLON
130.3 ft.	D	1	Crack Joint	Is Now Sealed	
131.1 ft.	D	1	Crack	Is Now Sealed	1 GALLON
135.0 ft.	D	I	Joint	Is Now Sealed	1 GALLON
139.7 ft.	D	I	Crack Joint	Is Now Sealed	2 GALLONS
145.2 ft.	D	I	Joint	Passed the air test	
150.3 ft.	D	1	Joint	Passed the air test	
152.2 ft.	D	1	Joint	Passed the air test	
157.3 ft.	D	I	Joint	Passed the air test	
162.8 ft.	D	1	Joint	Passed the air test	
168.1 ft.	D	I	Joint	Passed the air test	
172.8 ft.	D	1	Joint	Passed the air test	
177.9 ft.	D	1	Joint	Passed the air test	

Distance	Dir. Length	From/To	Code	Modifier/Severity Rating Comments
183.2 ft.	D	1	Joint	Passed the air test
188.3 ft.	D	I	Joint	Passed the air test
188.3 ft.	D	1	Joint	Passed the air test
190.8 ft.	D	1	Crack	Is Now Sealed 1 GALLON
193.2 ft.	D	1	Joint	Passed the air test
198.4 ft.	D	1	Joint	Passed the air test
203.6 ft.	D	1	Joint	Passed the air test
208.8 ft.	D	1	Joint	Passed the air test
214.0 ft.	D	1	Joint	Passed the air test
219.2 ft.	D	1	Joint	Passed the air test
224.2 ft.	D	1	Joint	Passed the air test
229.6 ft.	D	1	Joint	Passed the air test
234.5 ft.	D	1	Joint	Passed the air test
239.6 ft.	D	1	Joint	Passed the air test
244.7 ft.	D	1	Joint	Passed the air test
250.3 ft.	D	1	Joint	Passed the air test
255.0 ft.	D	1	Joint	Passed the air test
259.9 ft.	D	1	Joint	Passed the air test
265.1 ft.	D	I	Joint	Passed the air test
270.2 ft.	D	I	Joint	Passed the air test
275.2 ft.	D	1	Joint	Passed the air test
280.3 ft.	D	1	Joint	Passed the air test

Distance	Dir. Length	From/	To Code	Modifier/Severity Rating Comments
285.6 ft.	D	I	Joint	Passed the air test
290.9 ft.	D	1	Joint	Passed the air test
295.9 ft.	D	1	Joint	Passed the air test
301.0 ft.	D	1	Joint	Passed the air test
306.0 ft.	D	I	Joint	Passed the air test
311.1 ft.	D	1	Joint	Passed the air test
316.2 ft.	D	1	Joint	Passed the air test
321.3 ft.	D	I	Joint	Passed the air test
326.4 ft.	D	1	Joint	Passed the air test
331.5 ft.	D	1	Joint	Passed the air test
336.9 ft.	D	1	Joint	Passed the air test
342.1 ft.	D	I	Crack Joint	Is Now Sealed 1 GALLON
346.9 ft.	D	1	Joint	Passed the air test
352.2 ft.	D	1	Joint	Passed the air test
357.3 ft.	D	1	Joint	Passed the air test
362.4 ft.	D	1	Joint	Passed the air test
367.7 ft.	D	1	Joint	Passed the air test
372.5 ft.	D	1	Joint	Passed the air test
377.7 ft.	D	1	Joint	Passed the air test
382.9 ft.	D	1	Joint	Passed the air test
388.1 ft.	D	1	Joint	Passed the air test
388.1 ft.	D		Inspection	

Inspection's photos

Main Inspections Small Photos

Mainline ID: City: Address: Project name:

RUMSON OSPREY LN 88 RUMSON NJ OSPREY LN 8/5/21 RUMSON OSPREY

TO 87 LN GROUTING

Start date/time: Asset length: Weather: Operator: 8/6/2021 2:21 PM 407.0 ft. Dry John Read

Upstream node: Depth US: Downstream node: Depth DS:

88 87

Pipe shape: Pipe material: Pipe height: Pipe width:

Circular Clay ESVP 8.0 in.

Comments:

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments	
388.0 ft.	D	1	Inspection.				
393.3 ft.	D	1	Joint	Passed the air test			
397.9 ft.	D	1	Joint	Passed the air test			
403.8 ft.	D	1	Inspection	End			
403.8 ft.	D	1	Joint	Is Gapped		1 GALLON	

Inspection's photos



Main Inspections Pipe Run

Project name:

Mainline ID:

City:

Address:

8/5/21 RUMSON OSPREY

RUMSON OSPREY LN 89

OSPREY LN

LN

TO 88

RUMSON NJ

Surface condition:

Start date/time:

Direction:

Weather:

Asphalt

8/5/2021 8:12 AM

With the flow Pipe material:

Dry Pipe height:

Pipe width:

Pipe shape:

Circular

Clay ESVP

8.0 in.

Manhole '89' Mainline length: 404.8 ft. 404.8 ♦ (a) At 8.6 ft. Started at 0.0 ft. with flow -Infiltration - Infiltration in the 0.0 ft. on 8/5/2021 8:12:24 AM length: Severity: Crack Runner Category: O&M At 13.1 ft. Joint - Infiltration - Infiltration 58.1 ft. Omitted: 346.7 ft. in the Joint Severity: Weeper At 8.1 ft. 6/. Crack Joint Category: Structural Severity: Longitudinal At 24.1 ft. 12/. Category: Structural Lateral At 30.7 ft. 7/. Category: Inventory Crack Joint At 25.7 ft. Severity: Longitudinal Joint - Infiltration - Infiltration Category: Structural in the Joint At 48.0 ft. 7/. ▼ Severity: Weeper Category: Structural Crack Joint Severity: Longitudinal (a) At 30.7 ft. Category: Structural Infiltration - Infiltration in the At 58.1 ft. 5/. Crack Joint Severity: Crack Weeper Category: O&M Severity: Longitudinal Category: Structural At 37.4 ft. 9/. Lateral Severity: Capped Category: Inventory (a) At 48.0 ft. Infiltration - Infiltration in the Severity: Crack Runner Category: O&M

Direction: Start date/time: Mainline ID: Project name: 8/5/21 RUMSON OSPREY RUMSON OSPREY LN 89 8/5/2021 8:12 AM

With the flow

Page 2 of 22 Main Inspections Pipe Run

У		♦ (a) At 58.4 ft.
	Societard 59.4 ft	Infiltration - Infiltration in the 58.4 ft.
Mainline length: 404.8 ft.	At 68.3 ft. 12/. Crack Joint Severity: Longitudinal Category: Structural At 73.5 ft. 2/. Crack Joint Severity: Longitudinal Category: Structural At 136.8 ft. 9/. Crack - Crack in the pipe Severity: Longitudinal Category: Structural At 140.5 ft. 2/. Crack Joint Severity: Longitudinal Category: Structural At 140.5 ft. 2/. Crack Joint Severity: Longitudinal Category: Structural At 223.2 ft. 3/. Crack - Crack in the pipe	Pipe Severity: Crack Weeper Category: O&M
Mainlin	Severity: Longitudinal Category: Structural	★ At 279.2 ft. 12/. Lateral 286.9 Category: Inventory ★ At 285.9 ft. Joint - Infiltration in the Joint 325.0
	At 331.8 ft. 1/. Crack Joint Severity: Longitudinal Category: Structural	Severity: Weeper Category: Structural At 363.1 ft. Joint - Infiltration in the Joint 363.1
	Omitted: 41.7 ft. At 348.1 ft. 9/. Crack Joint Severity: Longitudinal Category: Structural At 352.3 ft. 9/. Crack Joint Severity: Longitudinal Category: Structural	Severity: Runner Category: Structural

Project name: Mainline ID: Start date/time: Direction: 8/5/21 RUMSON OSPREY RUMSON OSPREY LN 89 8/6/2021 7:49 AM

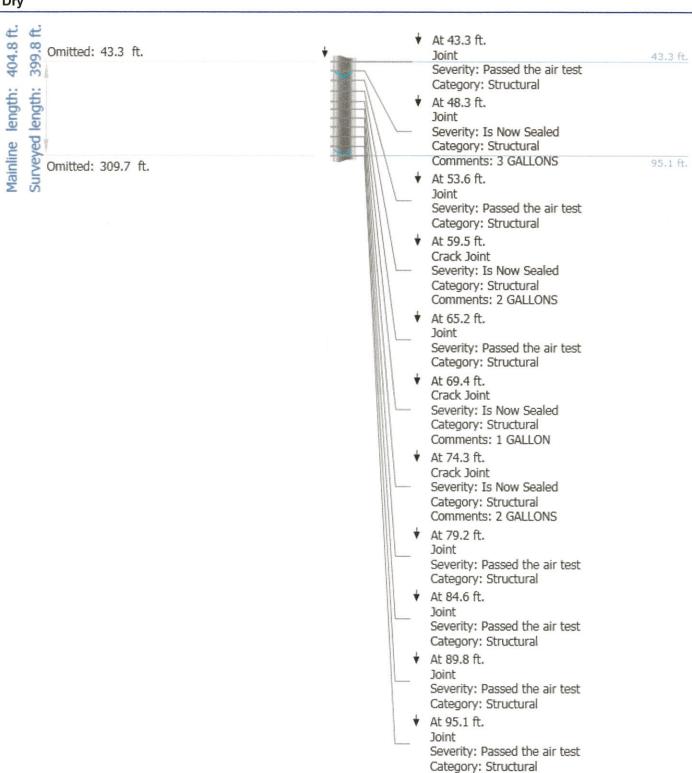
LN GROUTING

TO 88

With the flow

Weather:

Dry



Mainline ID:

Start date/time:

Direction:

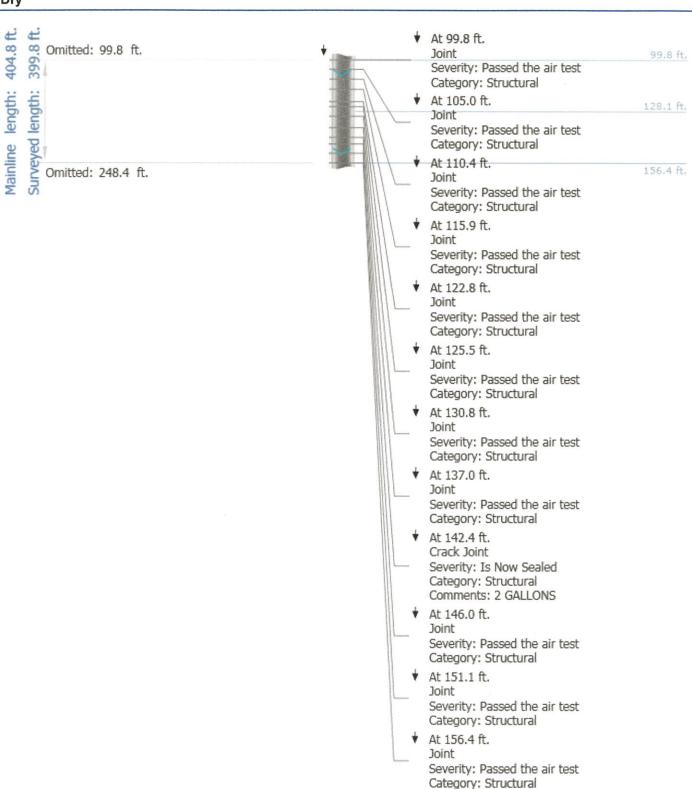
8/5/21 RUMSON OSPREY LN GROUTING

RUMSON OSPREY LN 89 8/6/2021 7:49 AM TO 88

With the flow

Weather:

Dry



Mainline ID:

Start date/time:

Direction:

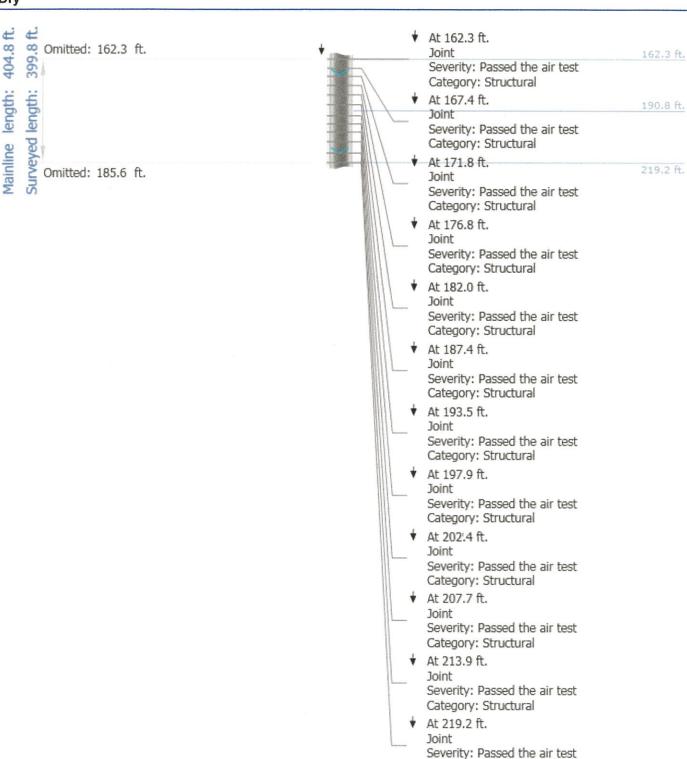
8/5/21 RUMSON OSPREY LN GROUTING RUMSON OSPREY LN 89 8/

8/6/2021 7:49 AM

With the flow

Weather:

Dry



Category: Structural

Mainline ID:

Start date/time:

Direction:

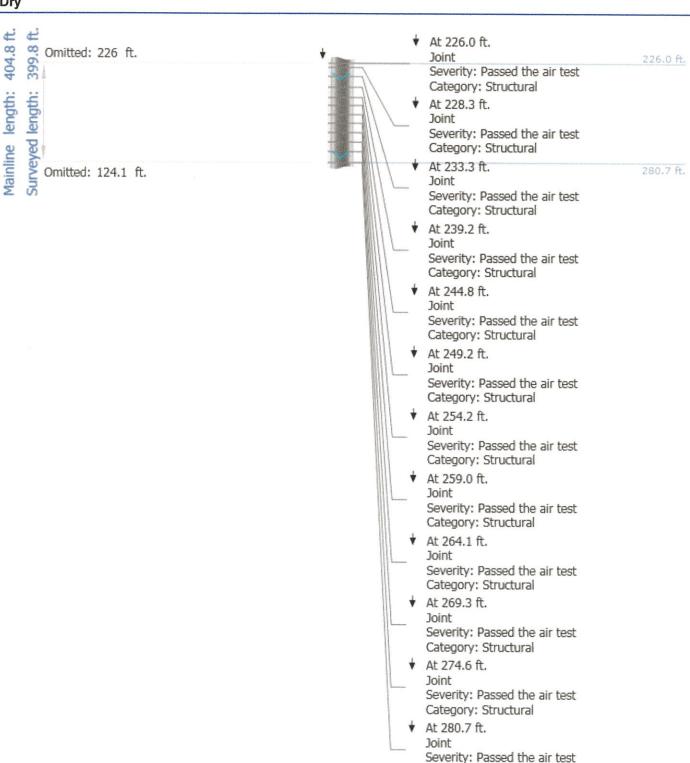
8/5/21 RUMSON OSPREY LN GROUTING

RUMSON OSPREY LN 89 8/6/2021 7:49 AM **TO 88**

With the flow

Weather:

Dry



Category: Structural

Project name: Mainline ID: Start date/time: Direction: 8/5/21 RUMSON OSPREY RUMSON OSPREY LN 89 8/6/2021 7:49 AM

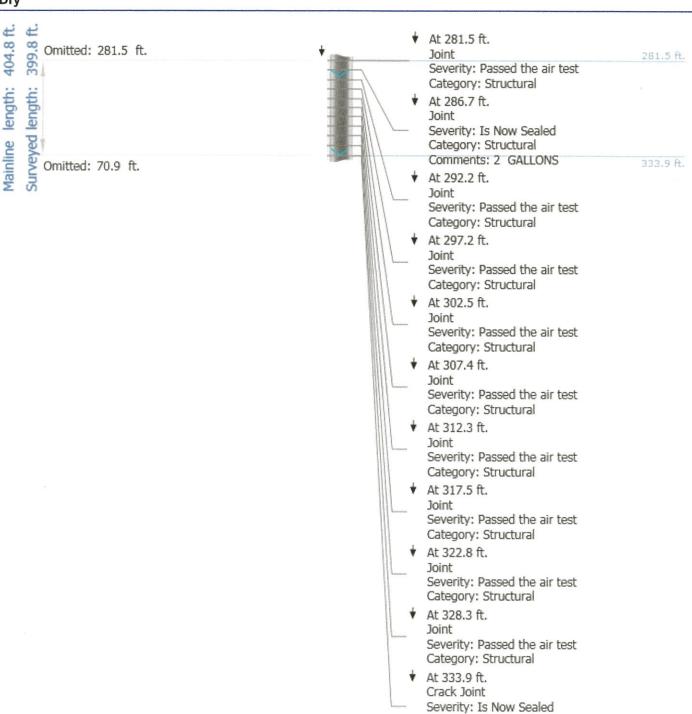
LN GROUTING

TO 88

With the flow

Weather:

Dry



Category: Structural Comments: 2 GALLONS Project name: Mainline ID: Start date/time: Direction: 8/5/21 RUMSON OSPREY

LN GROUTING

RUMSON OSPREY LN 89 8/6/2021 7:49 AM **TO 88**

With the flow

Weather:

Dry نے ★ At 338.2 ft. 00 Omitted: 338.2 ft. 404.8 399. Joint 338.2 ft. Severity: Passed the air test Category: Structural length: Mainline length: At 343.3 ft. Joint Severity: Passed the air test Surveyed Category: Structural Omitted: 15.2 ft. ♦ At 348.8 ft. 389.6 ft. Joint Severity: Is Now Sealed Category: Structural Comments: 1 GALLON At 353.7 ft. Crack Joint Severity: Is Now Sealed Category: Structural Comments: 1 GALLON At 359.4 ft. Joint Severity: Passed the air test Category: Structural At 364.4 ft. Crack Joint Severity: Is Now Sealed Category: Structural Comments: 2 GALLONS At 368.4 ft. Crack Joint Severity: Is Now Sealed Category: Structural Comments: 1 GALLON At 374.6 ft. Joint Severity: Passed the air test Category: Structural ★ At 379.3 ft. Joint Severity: Passed the air test Category: Structural ★ At 384.4 ft. Crack Joint Severity: Is Now Sealed Category: Structural Comments: 1 GALLON At 389.6 ft. Joint

Severity: Passed the air test Category: Structural

Mainline ID:

Start date/time:

Severity: End Category: Inventory

Direction:

8/5/21 RUMSON OSPREY **LN GROUTING**

RUMSON OSPREY LN 89 8/6/2021 7:49 AM **TO 88**

With the flow

Weather:

Dry



At 394.8 ft. Omitted: 394.8 ft. Stopped at on 8/6/202 Joint 394.8 ft. Stopped at 399.8 ft. with flow 🔸 Severity: Passed the air test on 8/6/2021 10:57:38 AM Category: Structural 404.8 ft. Surveyed At 399.7 ft. Joint Severity: Passed the air test Manhole '88' Category: Structural ★ At 399.8 ft. Inspection - END

Main Inspections Pipe Run

Project name: Mainline ID:

RUMSON OSPREY LN 88

TO 87

Start date/time: Direction:

8/6/2021 12:21 PM

LN GROUTING

8/5/21 RUMSON OSPREY

Pipe shape: Circular

With the flow

Pipe material:

Clay ESVP

City:

RUMSON NJ

Weather: Dry

Pipe height:

8.0 in.

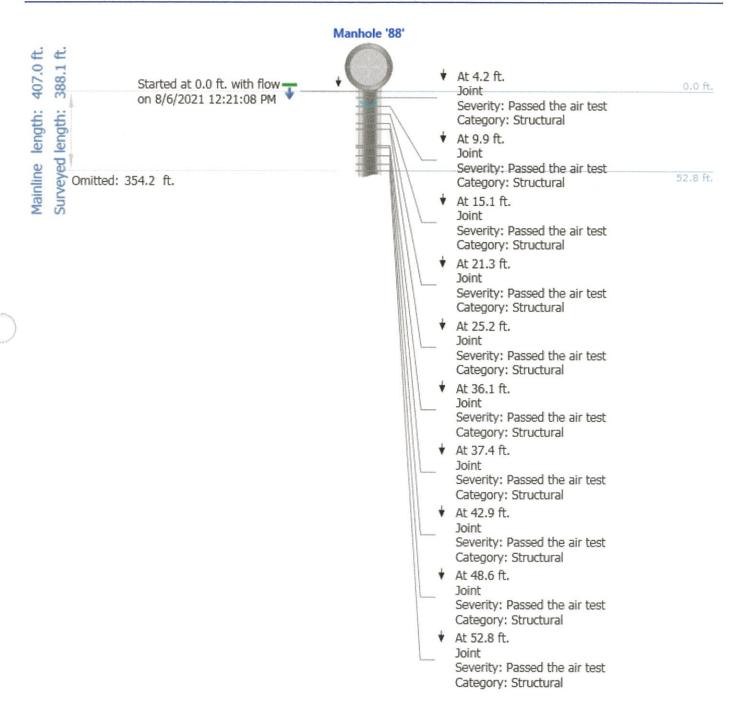
Address:

OSPREY LN

Surface condition:

Asphalt

Pipe width:



Main Inspections Pipe Run Page 14 of 22

Mainline ID:

Start date/time:

Direction:

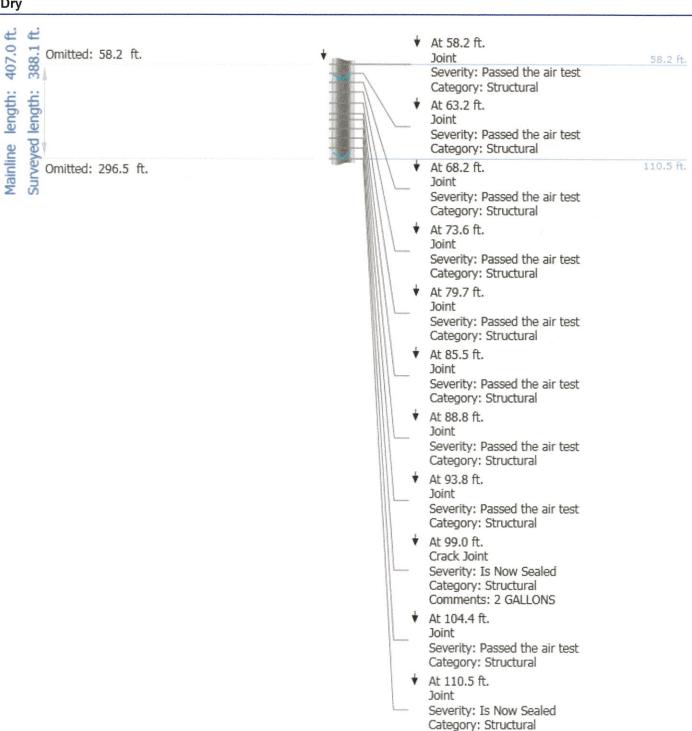
8/5/21 RUMSON OSPREY LN GROUTING

RUMSON OSPREY LN 88 8/6/2021 12:21 PM **TO 87**

With the flow

Weather:

Dry



Comments: 1 GALLON

Mainline ID:

Start date/time:

Direction:

8/5/21 RUMSON OSPREY LN GROUTING

RUMSON OSPREY LN 88 8/6/2021 12:21 PM **TO 87**

With the flow

116.7 ft.

152.2 ft.

Weather:



نے 0

omitted: 116.7 ft.

length: Mainline length: Surveyed

Omitted: 254.8 ft.

★ At 116.7 ft. Joint Severity: Is Now Sealed Category: Structural Comments: 1 GALLON ★ M At 116.8 ft.

Crack - Crack in the pipe Severity: Is Now Sealed Category: Structural Comments: 1 GALLON

At 119.7 ft. Joint

Severity: Passed the air test Category: Structural

★ At 125.1 ft. Joint Severity: Is Now Sealed Category: Structural Comments: 1 GALLON

At 130.3 ft. Crack Joint Severity: Is Now Sealed Category: Structural

★ At 131.1 ft. Crack - Crack in the pipe Severity: Is Now Sealed Category: Structural Comments: 1 GALLON

♦ At 135.0 ft. Joint Severity: Is Now Sealed Category: Structural Comments: 1 GALLON

★ At 139.7 ft. Crack Joint Severity: Is Now Sealed Category: Structural Comments: 2 GALLONS

♦ At 145.2 ft. Joint Severity: Passed the air test Category: Structural

♦ At 150.3 ft. Joint Severity: Passed the air test Category: Structural

★ At 152.2 ft. Joint

Severity: Passed the air test Category: Structural

Project name:

Mainline ID:

Start date/time:

Direction:

8/5/21 RUMSON OSPREY **LN GROUTING**

RUMSON OSPREY LN 88 8/6/2021 12:21 PM TO 87

With the flow

157.3 ft.

Weather:





★ At 157.3 ft.

Severity: Passed the air test

Category: Structural

At 162.8 ft. Joint

Severity: Passed the air test

Category: Structural 203.6 ft.

At 168.1 ft.

Joint

Severity: Passed the air test Category: Structural

At 172.8 ft.

Joint

Severity: Passed the air test Category: Structural

At 177.9 ft.

Joint

Severity: Passed the air test Category: Structural

At 183.2 ft.

Joint

Severity: Passed the air test Category: Structural

At 188.3 ft.

Joint

Severity: Passed the air test Category: Structural

At 188.3 ft.

Joint

Severity: Passed the air test Category: Structural

At 190.8 ft.

Crack - Crack in the pipe Severity: Is Now Sealed Category: Structural Comments: 1 GALLON

At 193.2 ft.

Joint

Severity: Passed the air test Category: Structural

At 198.4 ft.

Joint

Severity: Passed the air test Category: Structural

At 203.6 ft.

Joint

Severity: Passed the air test

Category: Structural

Project name:

Mainline ID:

Start date/time:

Direction:

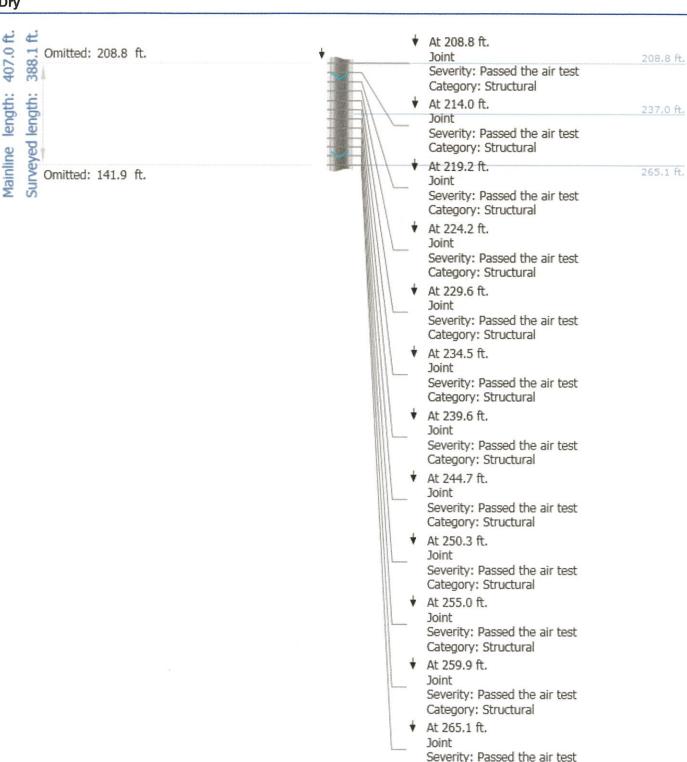
8/5/21 RUMSON OSPREY LN GROUTING

RUMSON OSPREY LN 88 8/6/2021 12:21 PM **TO 87**

With the flow

Weather:

Dry



Category: Structural

Project name: Mainline ID: Start date/time: Direction:

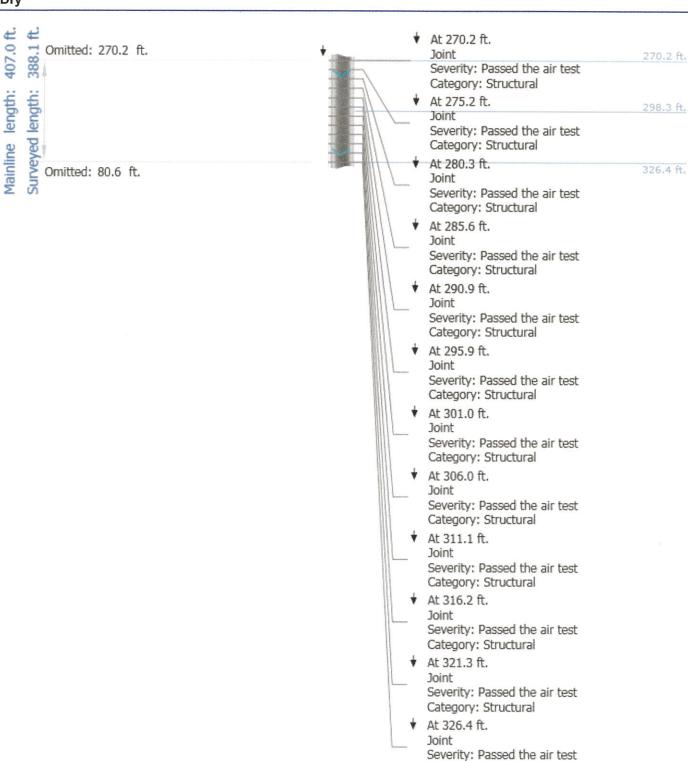
8/5/21 RUMSON OSPREY LN GROUTING

RUMSON OSPREY LN 88 8/6/2021 12:21 PM **TO 87**

With the flow

Weather:

Dry



Category: Structural

Project name: Mainline ID: Start date/time: Direction: 8/5/21 RUMSON OSPREY RUMSON OSPREY LN 88 8/6/2021 12:21 PM

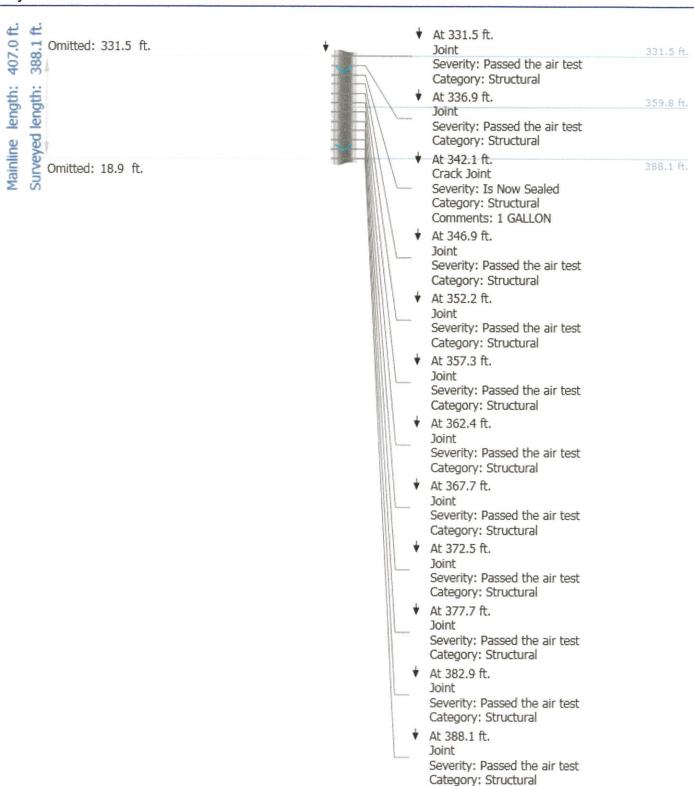
LN GROUTING

TO 87

With the flow

Weather:

Dry



Project name:

oject name: Mainline

8/5/21 RUMSON OSPREY LN GROUTING

Start date/time: 8/6/2021 2:21 PM

Pipe shape:

Circular

Mainline ID:

RUMSON OSPREY LN 88

TO 87

Direction:

With the flow

Pipe material:

Clay ESVP

City:

RUMSON NJ

KUMSUN N

Weather:

Dry

Pipe height:

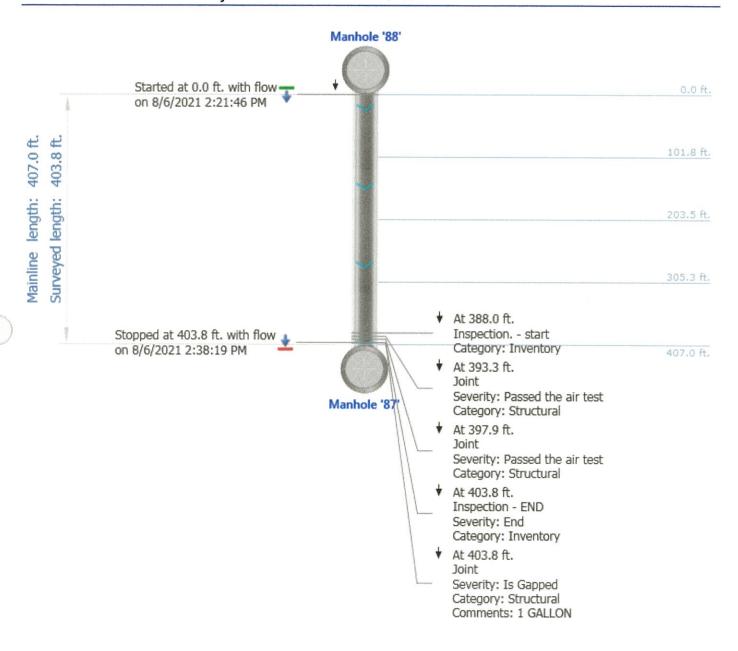
8.0 in.

Address:

OSPREY LN

Surface condition:

Asphalt



Owald ENTERPRISES, INC.

YELLOW BROOK PROPERTY COMPANY 247 BRIDGE AVENUE RED BANK, NEW JERSEY 07701

DVD 2
T.V. INSPECTION AND CHEMICAL GROUTING
OF VARIOUS SANITARY SEWER LINES
OSPREY LANE, RUMSON

AUGUST 9 AND 10, 2021

OSWALD ENTERPRISES, INC. 161 EAST ROAD - P.O. BOX 126 BELFORD, NEW JERSEY 07718

Main Office: 161 East Road, P.O. Box 126, Belford, New Jersey 07718 Phone: 732-787-1436 • Fax: 732-495-4990 www.OswaldEnt.com

Mainline ID:

City:

Address:

Project name:

RUMSON OSPREY LN 87 TO 85 **RUMSON NJ**

OSPREY LN

8/9/21 RUMSON OSPREY LN GROUTING DVD 2

LN GROU

Start date/time:

Asset length:

Weather:

Operator:

8/9/2021 7:31 AM

396.3 ft.

Dry

John Read

Upstream node:

Depth US:

Downstream node:

oomi read

87

Depuire

85

Depth DS:

Pipe shape:

Pipe material:

Pipe height:

Pipe width:

Circular

Clay ESVP

8.0 in.

Comments:

Distance	Dir. Length	From/To	Code	Modifier/Severity Rating Comments
5.6 ft.	D	1	Joint	Passed the air test
11.4 ft.	D	1	Joint	Passed the air test
15.1 ft.	D	1	Joint	Passed the air test
20.7 ft.	D	1	Joint	Passed the air test
27.3 ft.	D	1	Joint	Passed the air test
30.7 ft.	D	1	Joint	Passed the air test
35.4 ft.	D	, 1	Joint	Passed the air test
40.8 ft.	D	1	Joint	Passed the air test
46.7 ft.	D	1	Joint	Passed the air test
52.8 ft.	D	1	Joint	Passed the air test
56.0 ft.	D	I	Joint	Passed the air test
60.8 ft.	D	1	Joint	Passed the air test

Distance	Dir. Length	From/To	Code	Modifier/Severity Rating	Comments
66.1 ft.	D	I	Joint	Is Now Sealed	1 GALLON
71.6 ft.	D	1	Joint	Passed the air test	
77.9 ft.	D	1	Joint	Passed the air test	
83.8 ft.	D	1	Joint	Passed the air test	
86.3 ft.	D	I	Joint	Passed the air test	
91.8 ft.	D	1	Joint	Passed the air test	
97.5 ft.	D	1	Joint	Passed the air test	
103.8 ft.	D	1	Joint	Passed the air test	
109.5 ft.	D	1	Joint	Passed the air test	
109.5 ft.	D	1	Joint	Passed the air test	
116.5 ft.	D	1	Joint	Passed the air test	
119.5 ft.	D	1	Joint	Passed the air test	
124.2 ft.	D	I	Joint	Passed the air test	
130.1 ft.	D	1	Joint	Passed the air test	
136.3 ft.	D	1	Joint	Passed the air test	
141.1 ft.	D	I	Joint	Passed the air test	
144.8 ft.	D	1	Joint	Passed the air test	
149.9 ft.	D	I	Joint	Passed the air test	
155.9 ft.	D	1	Joint	Passed the air test	
161.2 ft.	D	1	Joint	Passed the air test	
165.3 ft.	D	1	Joint	Is Now Sealed	2 GALLONS
170.3 ft.	D	1	Joint	Passed the air test	

Distance	Dir. Length	From/To	Code	Modifier/Severity Rating	Comments
175.7 ft.	D	1	Joint	Passed the air test	
181.7 ft.	D	1	Joint	Passed the air test	
187.4 ft.	D	1	Joint	Passed the air test	
190.9 ft.	D	1	Joint	Passed the air test	
196.0 ft.	D	I	Joint	Passed the air test	
201.6 ft.	D	I	Joint	Passed the air test	
207.7 ft.	D	1	Joint	Passed the air test	
213.9 ft.	D	1	Joint	Passed the air test	
216.7 ft.	D	1	Joint	Passed the air test	
221.6 ft.	D	1	Joint	Passed the air test	
227.0 ft.	D	1	Joint	Passed the air test	
233.0 ft.	D	1	Joint	Passed the air test	
239.1 ft.	D	I	Joint	Is Now Sealed	1 GALLON
244.6 ft.	D	1	Joint	Is Now Sealed	1 GALLON
247.6 ft.	D	1	Joint	Passed the air test	
252.7 ft.	D	1	Joint	Passed the air test	
257.9 ft.	D	1	Joint	Passed the air test	
263.6 ft.	D	1	Joint	Passed the air test	
269.0 ft.	D	I	Joint	Passed the air test	
274.7 ft.	D	1	Joint	Passed the air test	
280.1 ft.	D	1	Joint	Passed the air test	
285.8 ft.	D	1	Joint	Passed the air test	
-					

Distance	Dir. Length	From/To	Code	Modifier/Severity Rating Comments
289.9 ft.		1	Joint	Passed the air test
293.9 ft.	D	1	Joint	Passed the air test
299.0 ft.	D	I	Joint	Passed the air test
304.4 ft.	D	1	Joint	Passed the air test
309.9 ft.	D	1	Joint	Passed the air test
315.6 ft.	D	I	Joint	Passed the air test
320.7 ft.	D	1	Joint	Passed the air test
324.7 ft.	D	1	Joint	Passed the air test
329.8 ft.	D	1	Joint	Passed the air test
333.9 ft.	D	1	Joint	Passed the air test
335.2 ft.	D	1	Joint	Passed the air test
340.5 ft.	D	I	Joint	Passed the air test
346.3 ft.	D	1	Joint	Passed the air test
352.1 ft.	D	I	Joint	Passed the air test
355.9 ft.	D	1	Joint	Passed the air test
360.7 ft.	D	1	Joint	Passed the air test
365.7 ft.	D	1	Joint	Passed the air test
371.1 ft.	D	1	Joint	Passed the air test
376.3 ft.	D	1	Joint	Passed the air test
381.6 ft.	D	1	Joint	Passed the air test
387.1 ft.	D	1	Joint	Passed the air test
391.5 ft.	D	I	Joint	Passed the air test
	- 0			

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
391.5 ft.	D	1	Inspection	End		

Mainline ID: City: Address: Project name:

RUMSON SHREWSBURY RUMSON NJ SHREWSBURY DR 8/9/21 RUMSON OSPREY

DR 85 TO 84 LN DVD 2

Start date/time: Asset length: Weather: Operator: 8/9/2021 10:36 AM 44.3 ft. Dry John Read

Upstream node: Depth US: Downstream node: Depth DS:

85 84

Pipe shape: Pipe material: Pipe height: Pipe width: Circular Clay ESVP 12.0 in.

Comments:

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating Comments
10.1 ft.	D	1	Joint	Other	
40.6 ft.	D	1	Joint	Other	-
44.3 ft.	D	1	Inspection	End	

Mainline ID: City: Address: Project name:

RUMSON SHREWSBURY RUMSON NJ SHREWSBURY DR 8/9/21 RUMSON OSPREY

DR 84 TO 83 LN DVD 2

Start date/time: Asset length: Weather: Operator: 8/9/2021 10:51 AM 328.0 ft. Dry John Read

Upstream node: Depth US: Downstream node: Depth DS:

84 83 Pipe shape: Pipe material: Pipe height: Pipe width:

Circular Clay ESVP 12.0 in.

Comments:

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
6.7 ft.	D	1	Joint	Other		
240.4 ft.	D	12 /	Lateral			
321.0 ft.	D	1	Joint	Other		
328.0 ft.	D	1	Inspection	End		

Mainline ID: City: Address: Project name:

RUMSON SHREWSBURY RUMSON NJ SHREWSBURY DR 8/9/21 RUMSON OSPREY

DR 83 TO 82 LN DVD 2

Start date/time: Asset length: Weather: Operator: 8/9/2021 11:00 AM 371.4 ft. Dry John Read

Upstream node: Depth US: Downstream node: Depth DS: 83

Pipe shape: Pipe material: Pipe height: Pipe width:

Clay ESVP

Comments:

Circular

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
7.4 ft.	D	1	Joint	Other		
99.7 ft.	D	12 /	Lateral			
224.8 ft.	D	12 /	Lateral			
319.6 ft.	D	12 /	Lateral Defects	Mineral Deposit		

12.0 in.



363.8 ft.	D	1	Joint	Other
371.4 ft.	D	1	Inspection	End

Mainline ID:

City:

Address:

Project name:

RUMSON SHREWSBURY

DR 82 TO 76

RUMSON NJ

SHREWSBURY DR

8/9/21 RUMSON OSPREY

LN DVD 2

Start date/time:

Asset length:

Weather:

Operator:

8/9/2021 2:11 PM

381.6 ft.

Dry

John Read

Upstream node:

Depth US:

Downstream node:

Depth DS:

82

Pipe shape:

Pipe material:

76

Circular

Clay ESVP

Pipe height: 12.0 in.

Pipe width:

Comments:

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
5.5 ft.	D	1	Joint	Other		
85.2 ft.	D	12 /	Lateral			
154.1 ft.	D	1	Joint - Infiltration	Runner		****
173.4 ft.	D	10 /	Lateral Defects	Mineral Deposit		



377.7 ft. D	1	Joint	Other	
381.6 ft. D	1	Inspection	End	

Mainline ID:

City:

Address:

Project name:

RUMSON SHREWSBURY

RUMSON NJ DR 76 TO PUMP STAT.

SHREWSBURY DR

8/9/21 RUMSON OSPREY

LN DVD 2

Start date/time:

Asset length:

Weather:

Operator:

8/9/2021 2:26 PM

57.5 ft.

John Read

Upstream node:

Dry

76

Depth US:

Downstream node: **PUMP STAT.**

Depth DS:

Pipe shape:

Pipe material:

Pipe height:

Pipe width:

Circular

Clay ESVP

12.0 in.

Comments:

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
8.5 ft.	D	1	Joint	Other		
55.9 ft.	D	1	Fracture	Circular		
55.9 ft.	D	1	Infiltration	Crack Runner		



57.5 ft. D 1 Inspection End

Mainline ID:

City:

Address:

Project name:

RUMSON SHREWSBURY

RUMSON NJ

SHREWSBURY DR

Downstream node:

8/9/21 RUMSON OSPREY

DR 85 TO 84 Start date/time:

Asset length:

Weather:

LN GROUTING DVD 2 Operator:

8/10/2021 8:23 AM

44.3 ft.

Dry

John Read

Upstream node:

Depth US:

85

Pipe shape:

84

Depth DS:

Pipe material: Clay ESVP

Pipe height: 12.0 in.

Pipe width:

Circular

Comments:

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity Rating Comments	
5.4 ft.	D	1	Joint	Passed the air test	and the second
10.3 ft.	D	1	Joint	Passed the air test	
16.9 ft.	D	1	Joint	Passed the air test	
22.9 ft.	D	1	Joint	Passed the air test	-
29.0 ft.	D	1	Joint	Passed the air test	
35.0 ft.	D	I	Joint	Passed the air test	
41.1 ft.	D	1	Joint	Passed the air test	
43.9 ft.	D	. 1	Inspection	End	

Mainline ID: City: Address: Project name:

RUMSON SHREWSBURY RUMSON NJ

DR 84 TO 83

Start date/time: Asset length:

8/10/2021 8:49 AM 328.0 ft. Depth US:

Pipe material:

Clay ESVP

Upstream node:

84

Pipe shape: Circular

Comments:

SHREWSBURY DR

8/9/21 RUMSON OSPREY LN GROUTING DVD 2

Operator:

Depth DS:

John Read

Downstream node:

83

Dry

Pipe height:

Weather:

12.0 in.

Pipe width:

Distance	Dir. Length	From/To	Code	Modifier/Severity Rating Comments
6.8 ft.	D	I	Joint	Passed the air test
13.9 ft.	D	1	Joint	Passed the air test
20.7 ft.	D	1	Joint	Passed the air test
26.9 ft.	D	1	Joint	Passed the air test
32.4 ft.	D	1	Joint	Passed the air test
37.8 ft.	D	I	Joint	Passed the air test
44.6 ft.	D	1	Joint	Passed the air test
50.8 ft.	D	1	Joint	Passed the air test
56.9 ft.	D	1	Joint	Passed the air test
62.9 ft.	D	1	Joint	Passed the air test
68.8 ft.	D	1	Joint	Passed the air test
74.6 ft.	D	1	Joint	Passed the air test
80.8 ft.	D	1	Joint	Passed the air test
87.2 ft.	D	1	Joint	Passed the air test
93.6 ft.	D	I	Joint	Passed the air test

Distance	Dir. Length	From/To	Code	Modifier/Severity Rating Comments
99.5 ft.	D	1	Joint	Passed the air test
105.7 ft.	D	1	Joint	Passed the air test
112.0 ft.	D	1	Joint	Passed the air test
117.9 ft.	D	1	Joint	Passed the air test
124.0 ft.	D	1	Joint	Passed the air test
131.4 ft.	D	1	Joint	Passed the air test
137.0 ft.	D	1	Joint	Passed the air test
143.0 ft.	D	1	Joint	Passed the air test
150.0 ft.	D	1	Joint	Passed the air test
155.2 ft.	D	1	Joint	Passed the air test
162.2 ft.	D	1	Joint	Passed the air test
167.5 ft.	D	I	Joint	Passed the air test
173.1 ft.	D	1	Joint	Passed the air test
180.4 ft.	D	1	Joint	Passed the air test
185.3 ft.	D	1	Joint	Passed the air test
191.5 ft.	D	1	Joint	Passed the air test
198.4 ft.	D	1	Joint	Passed the air test
204.4 ft.	D	1	Joint	Passed the air test
210.5 ft.	D	1	Joint	Passed the air test
216.4 ft.	D	I	Joint	Passed the air test
222.3 ft.	D	1	Joint	Passed the air test
227.9 ft.	D	1	Joint	Passed the air test

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments	
234.0 ft.	D	I.	Joint	Passed the air test			
240.6 ft.	D	1	Joint	Passed the air test			
242.1 ft.	D	1	Joint	Passed the air test			
248.5 ft.	D	1	Joint	Passed the air test			
254.7 ft.	D	1	Joint	Passed the air test			
261.0 ft.	D	1	Joint	Passed the air test			
267.2 ft.	D	1	Joint	Passed the air test			
275.4 ft.	D	1	Joint	Passed the air test			
279.6 ft.	D	1	Joint	Passed the air test			***************************************
285.9 ft.	D	1	Joint	Passed the air test			
291.9 ft.	D	1	Joint	Passed the air test			
297.3 ft.	D	1	Inspection	End	C.		
297.7 ft.	D	1	Joint	Passed the air test			

Mainline ID: City: Address: Project name:

RUMSON SHREWSBURY RUMSON NJ SHREWSBURY DR

8/9/21 RUMSON OSPREY DR 84 TO 83 LN GROUTING DVD 2

Start date/time: Asset length: Weather: Operator: 8/10/2021 11:36 AM 328.0 ft. Dry John Read

Upstream node: Depth US: Downstream node: Depth DS:

84 83 Pipe shape: Pipe material: Pipe height: Pipe width:

Circular Clay ESVP 12.0 in. Comments:

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
297.7 ft.	D	I	Inspection.			
303.9 ft.	D	1	Joint	Passed the air test		
310.4 ft.	D	1	Joint	Passed the air test		
316.3 ft.	D	1	Joint	Passed the air test		
322.2 ft.	D	1	Joint	Passed the air test	***************************************	
323.7 ft.	D	1	Inspection	End		

Mainline ID:

City:

Address:

Project name:

RUMSON SHREWSBURY DR 82 TO 76

EWSBURY RUMSON NJ

SHREWSBURY DR

8/9/21 RUMSON OSPREY

LN DVD 2

Start date/time:

Asset length:

Weather:

Operator:

8/10/2021 1:18 PM

381.6 ft.

Dry

John Read

Upstream node:

Depth US:

Downstream node:

Depth DS:

82

Pipe shape:

Pipe material:

76

Pipe height:

repair bo.

Circular

Clay ESVP

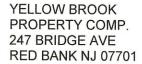
12.0 in.

Pipe width:

Comments:

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
153.6 ft.	D	1	Joint	Is Now Sealed		3 GALLONS
169.7 ft.	D	1	Inspection	End		
171.8 ft.	D	10 /	Lateral Defects	Is Now Sealed	-	3 GALLONS





Project name:

Mainline ID:

City.

Address:

8/9/21 RUMSON OSPREY LN DVD 2 RUMSON SHREWSBURY DR 85 TO 84 SHREWSBURY DR

Start date/time:

Direction:

SHKEWSBUKT DI

8/9/2021 10:36 AM

With the flow

Weather:

RUMSON NJ

Surface condition:

Pipe shape:

Pipe material:

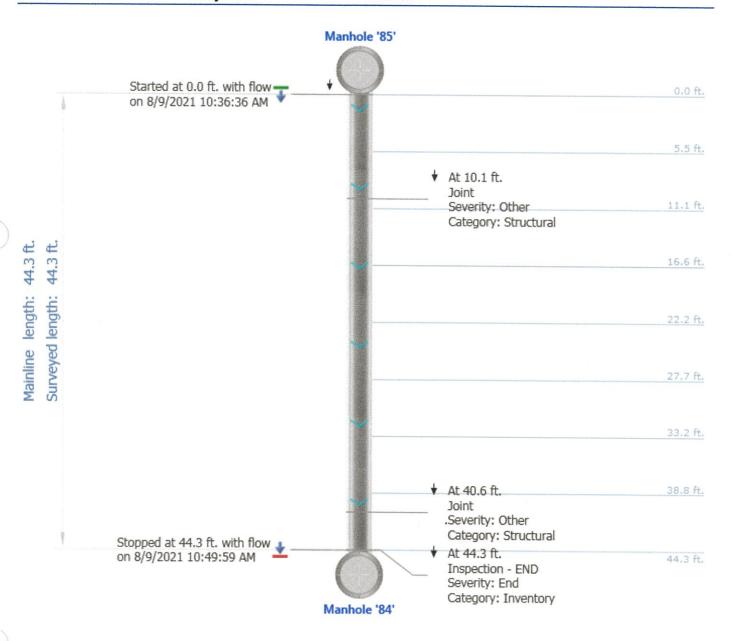
DryPipe height:

Asphalt

Circular

Clay ESVP

12.0 in.



Project name:

Mainline ID:

City:

Address:

8/9/21 RUMSON OSPREY LN DVD 2

RUMSON SHREWSBURY DR 84 TO 83

Start date/time:

Direction:

RUMSON NJ

SHREWSBURY DR

8/9/2021 10:51 AM

With the flow

Weather:

Surface condition:

Pipe shape:

Dry

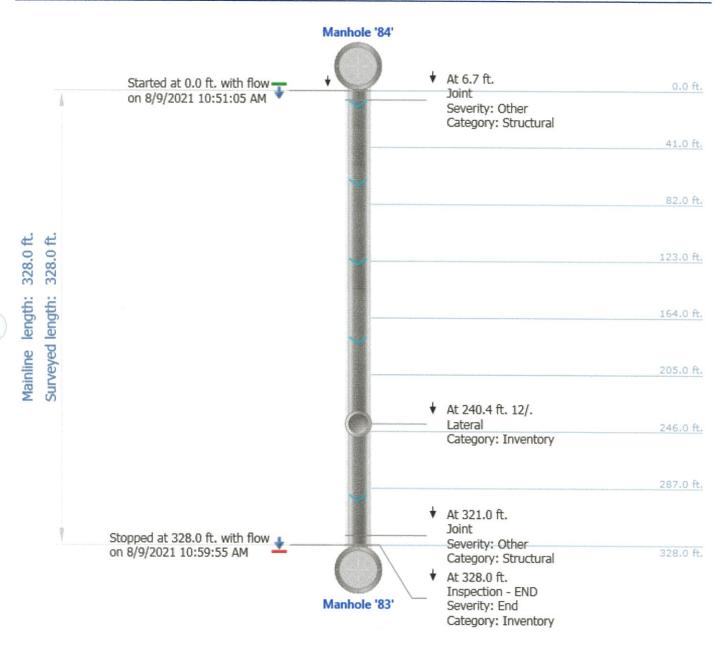
Asphalt

Circular

Pipe material:

Pipe height:





Project name:

8/9/21 RUMSON OSPREY LN DVD 2

Start date/time:

8/9/2021 11:00 AM

Pipe shape:

Circular

Mainline ID:

RUMSON SHREWSBURY DR 83 TO 82

Direction:

With the flow Pipe material:

Clay ESVP

City:

RUMSON NJ

Weather: Dry

Pipe height:

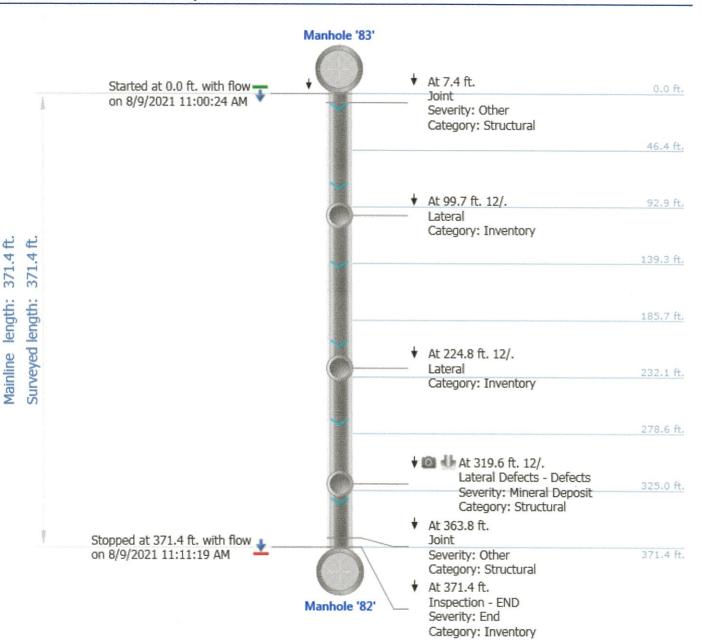
12.0 in.

Address:

SHREWSBURY DR

Surface condition:

Asphalt



Project name:

8/9/21 RUMSON OSPREY

LN DVD 2

Start date/time:

8/9/2021 2:11 PM

Pipe shape:

Circular

Mainline ID:

RUMSON SHREWSBURY

DR 82 TO 76

Direction:

With the flow

Pipe material:

Clay ESVP

City:

RUMSON NJ

Weather:

Dry Pipe height:

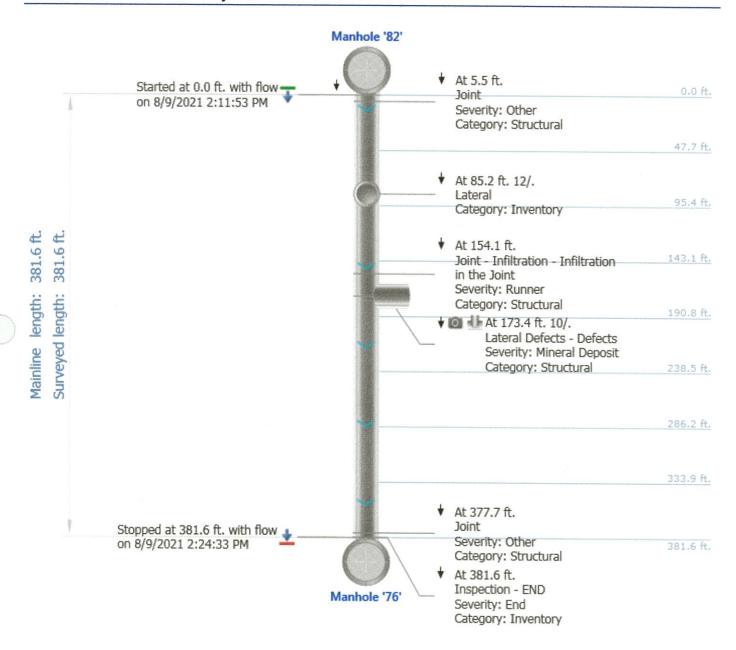
12.0 in.

Address:

SHREWSBURY DR

Surface condition:

Asphalt



Project name:

8/9/21 RUMSON OSPREY LN DVD 2

Start date/time:

8/9/2021 2:26 PM

Pipe shape:

Circular

Mainline ID:

RUMSON SHREWSBURY DR 76 TO PUMP STAT.

Direction:

With the flow

Pipe material:

Clay ESVP

City:

city.

RUMSON NJ

Weather:

Dry

Pipe height:

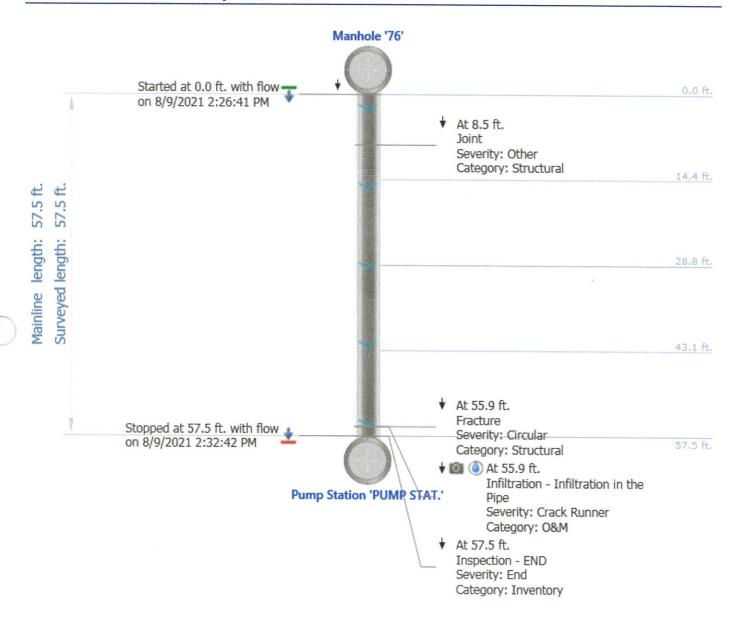
12.0 in.

Address:

SHREWSBURY DR

Surface condition:

Asphalt



YELLOW BROOK PROPERTY COMP. 247 BRIDGE AVE RED BANK NJ 07701

Main Inspections Small Photos

Mainline ID:

City:

Address:

Project name:

RUMSON OSPREY LN 87

RUMSON NJ

OSPREY LN

8/9/21 RUMSON OSPREY LN GROUTING DVD 2

TO 85 Start date/time:

Asset length:

Weather:

Operator:

8/9/2021 7:31 AM

396.3 ft.

Dry

John Read

Upstream node:

Depth US:

Downstream node:

Depth DS:

87

85

Pipe shape: Circular

Pipe material: Clay ESVP

Pipe height: 8.0 in.

Pipe width:

Comments:

_		Code	Modifier/Severity Rating C	Comments
D	1	Joint	Passed the air test	
D	1	Joint	Passed the air test	The second of th
D	1	Joint	Passed the air test	
D	1	Joint	Passed the air test	
D	1	Joint	Passed the air test	
D	I	Joint	Passed the air test	
D	1	Joint	Passed the air test	
D	1	Joint	Passed the air test	
D	1	Joint	Passed the air test	\
D	I	Joint	Passed the air test	
D	1	Joint	Passed the air test	
D	1	Joint	Passed the air test	
	D D D D D D D	D	D	D / Joint Passed the air test

Distance	Dir. Length	From/To	Code	Modifier/Severity Rating	Comments
66.1 ft.	D	1	Joint	Is Now Sealed	1 GALLON
71.6 ft.	D	1	Joint	Passed the air test	
77.9 ft.	D	1	Joint	Passed the air test	
83.8 ft.	D	1	Joint	Passed the air test	
86.3 ft.	D	1	Joint	Passed the air test	
91.8 ft.	D	1	Joint	Passed the air test	
97.5 ft.	D	1	Joint	Passed the air test	
103.8 ft.	D	1	Joint	Passed the air test	
109.5 ft.	D	1	Joint	Passed the air test	
109.5 ft.	D	1	Joint	Passed the air test	
116.5 ft.	D	1	Joint	Passed the air test	
119.5 ft.	D	1	Joint	Passed the air test	
124.2 ft.	D	1	Joint	Passed the air test	
130.1 ft.	D	1	Joint	Passed the air test	
136.3 ft.	D	1	Joint	Passed the air test	
141.1 ft.	D	1	Joint	Passed the air test	
144.8 ft.	D	1	Joint	Passed the air test	
149.9 ft.	D	1	Joint	Passed the air test	
155.9 ft.	D	I	Joint	Passed the air test	
161.2 ft.	D	1	Joint	Passed the air test	
165.3 ft.	D	1	Joint	Is Now Sealed	2 GALLONS
170.3 ft.	D	1	Joint	Passed the air test	

Distance	Dir.	Length From/To	Code	Modifier/Severity Rating	Comments
175.7 ft.	D	1	Joint	Passed the air test	
181.7 ft.	D	1	Joint	Passed the air test	
187.4 ft.	D	1	Joint	Passed the air test	
190.9 ft.	D	1	Joint	Passed the air test	
196.0 ft.	D	I	Joint	Passed the air test	
201.6 ft.	D	I	Joint	Passed the air test	
207.7 ft.	D	I	Joint	Passed the air test	
213.9 ft.	D	1	Joint	Passed the air test	
216.7 ft.	D	1	Joint	Passed the air test	
221.6 ft.	D	1	Joint	Passed the air test	
227.0 ft.	D	I	Joint	Passed the air test	
233.0 ft.	D	I	Joint	Passed the air test	
239.1 ft.	D	I	Joint	Is Now Sealed	1 GALLON
244.6 ft.	. D	1	Joint	Is Now Sealed	1 GALLON
247.6 ft	. D	1	Joint	Passed the air test	
252.7 ft	. D	i	Joint	Passed the air test	
257.9 ft	. D	1	Joint	Passed the air test	
263.6 ft	. D	1	Joint	Passed the air test	
269.0 ft	. D	I	Joint	Passed the air test	
274.7 ft	. D	I	Joint	Passed the air test	
280.1 f	t. D) 1	Joint	Passed the air test	
285.8 f	t. D) 1	Joint	Passed the air test	

Distance	Dir. Length	From/To	Code	Modifier/Severity Rating Comments
289.9 ft.	D	1	Joint	Passed the air test
293.9 ft.	D	I	Joint	Passed the air test
299.0 ft.	D	1	Joint	Passed the air test
304.4 ft.	D	1	Joint	Passed the air test
309.9 ft.	D	I	Joint	Passed the air test
315.6 ft.	D	I	Joint	Passed the air test
320.7 ft.	D	1	Joint	Passed the air test
324.7 ft.	D	1	Joint	Passed the air test
329.8 ft.	D	I	Joint	Passed the air test
333.9 ft.	D	1	Joint	Passed the air test
335.2 ft.	D	I	Joint	Passed the air test
340.5 ft.	D	I	Joint	Passed the air test
346.3 ft.	D	I	Joint	Passed the air test
352.1 ft.	D	1	Joint	Passed the air test
355.9 ft.	D	I	Joint	Passed the air test
360.7 ft.	D	1	Joint	Passed the air test
365.7 ft.	D	I	Joint	Passed the air test
371.1 ft.	D	I	Joint	Passed the air test
376.3 ft.	D	I	Joint	Passed the air test
381.6 ft.	D	I	Joint	Passed the air test
387.1 ft.	D	I	Joint	Passed the air test
391.5 ft.	D	1	Joint	Passed the air test

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments	
391.5 ft.	D	1	Inspection	End			

Mainline ID: City: Address: Project name:

RUMSON SHREWSBURY RUMSON NJ SHREWSBURY DR 8/9/21 RUMSON OSPREY

DR 85 TO 84 LN DVD 2

Start date/time: Asset length: Weather: Operator: 8/9/2021 10:36 AM 44.3 ft. Dry John Read

Upstream node: Depth US: Downstream node: Depth DS: 85

Pipe shape: Pipe material: Pipe height: Pipe width: Circular

Clay ESVP Comments:

Observations

Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
D	1	Joint	Other		
D	1	Joint	Other		
D	1	Inspection	End		
	D	D /	D / Joint	D / Joint Other	D / Joint Other

12.0 in.

Mainline ID:

City:

Address:

Project name:

RUMSON SHREWSBURY RUMSON NJ

SHREWSBURY DR

8/9/21 RUMSON OSPREY

DR 84 TO 83 Start date/time:

Asset length:

LN DVD 2

Weather:

Operator:

8/9/2021 10:51 AM

328.0 ft.

Dry

John Read

Upstream node:

Depth US:

Downstream node:

Depth DS:

84

Pipe shape:

Pipe material:

Circular

Pipe height: 12.0 in.

Pipe width:

Clay ESVP

Comments:

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
6.7 ft.	D	1	Joint	Other		
240.4 ft.	D	12 /	Lateral			
321.0 ft.	D	1	Joint	Other		
328.0 ft.	D	1	Inspection	End		

Mainline ID: City: Address: Project name:

RUMSON SHREWSBURY RUMSON NJ SHREWSBURY DR 8/9/21 RUMSON OSPREY

DR 83 TO 82 LN DVD 2

Start date/time: Asset length: Weather: Operator: 8/9/2021 11:00 AM 371.4 ft. Dry John Read

Upstream node: Depth US: Downstream node: Depth DS: 83 82

Pipe shape: Pipe material: Pipe height: Pipe width: Circular Clay ESVP

Comments:

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
7.4 ft.	D	I	Joint	Other		
99.7 ft.	D	12 /	Lateral			
224.8 ft.	D	12 /	Lateral			
319.6 ft.	D	12 /	Lateral Defects	Mineral Deposit		

12.0 in.



363.8 ft. D	,	Joint	Other	
371.4 ft. D	1	Inspection	End	

Mainline ID:

City:

Address:

Project name:

RUMSON SHREWSBURY

RUMSON NJ

SHREWSBURY DR

8/9/21 RUMSON OSPREY

LN DVD 2

DR 82 TO 76 Start date/time:

Asset length:

Weather:

Operator:

8/9/2021 2:11 PM

381.6 ft.

Dry

John Read

Upstream node:

Depth US:

Downstream node:

Depth DS:

82

Pipe shape:

Pipe material:

Circular

Clay ESVP

Pipe height: 12.0 in.

Pipe width:

Comments:

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
5.5 ft.	D	I	Joint	Other		
85.2 ft.	D	12 /	Lateral			
154.1 ft.	D	I	Joint - Infiltration	Runner		
173.4 ft.	D	10 /	Lateral Defects	Mineral Deposit		



377.7 ft. D	/ Joint	Other	
381.6 ft. D	/ Inspection	n End	

Mainline ID:

Address:

dress: Project name:

RUMSON SHREWSBURY DR 76 TO PUMP STAT.

SHREWSBURY DR

8/9/21 RUMSON OSPREY

LN DVD 2

Start date/time:

Asset length:

RUMSON NJ

Weather:

Operator:

8/9/2021 2:26 PM Upstream node:

57.5 ft.

City:

Dry

John Read

76

Depth US:

Downstream node: **PUMP STAT.**

Depth DS:

Pipe shape:

Pipe material:

Pipe height:

Pipe width:

Circular

Clay ESVP

12.0 in.

Comments:

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
8.5 ft.	D	I	Joint	Other		
55.9 ft.	D	1	Fracture	Circular		
55.9 ft.	D	1	Infiltration	Crack Runner		



57.5 ft. D / Inspection End

Mainline ID:

City:

Address:

Project name:

RUMSON SHREWSBURY

DR 85 TO 84

RUMSON NJ

SHREWSBURY DR

Downstream node:

8/9/21 RUMSON OSPREY LN GROUTING DVD 2

Start date/time:

Asset length:

Weather:

Operator: John Read

8/10/2021 8:23 AM Upstream node:

44.3 ft. Depth US:

Dry

85

Pipe shape:

84

Depth DS:

Pipe material:

Pipe height:

Pipe width:

Circular

Clay ESVP

12.0 in.

Comments:

Observations

From/To	Code	Modifier/Severity Rating Comments
1	Joint	Passed the air test
1	Joint	Passed the air test
I	Joint	Passed the air test
I	Joint	Passed the air test
I	Joint	Passed the air test
1	Joint	Passed the air test
I	Joint	Passed the air test
1	Inspection	End
	1	/ Inspection

Mainline ID:

City:

Address:

Project name:

RUMSON SHREWSBURY RUMSON NJ DR 84 TO 83

8/9/21 RUMSON OSPREY LN GROUTING DVD 2

Start date/time:

Asset length:

Weather:

Operator:

8/10/2021 8:49 AM

328.0 ft.

Dry

John Read

Upstream node:

Depth US:

Downstream node:

SHREWSBURY DR

Depth DS:

84

Pipe shape:

Pipe material:

83

Circular

Clay ESVP

Pipe height: 12.0 in.

Pipe width:

Comments:

Observations

Distance	Dir. Length	From/T	o Code	Modifier/Severity Rating Comments
6.8 ft.	D	1	Joint	Passed the air test
13.9 ft.	D	1	Joint	Passed the air test
20.7 ft.	D	1	Joint	Passed the air test
26.9 ft.	D	1	Joint	Passed the air test
32.4 ft.	D	1	Joint	Passed the air test
37.8 ft.	D	1	Joint	Passed the air test
44.6 ft.	D	1	Joint	Passed the air test
50.8 ft.	D	1	Joint	Passed the air test
56.9 ft.	D	1	Joint	Passed the air test
62.9 ft.	D	1	Joint	Passed the air test
68.8 ft.	D	1	Joint	Passed the air test
74.6 ft.	D	1	Joint	Passed the air test
80.8 ft.	D	1	Joint	Passed the air test
87.2 ft.	D	1	Joint	Passed the air test
93.6 ft.	D	1	Joint	Passed the air test

Observations

D' I	5: 1 ::			
Distance	Dir. Length	From/To	Code	Modifier/Severity Rating Comments
99.5 ft.	D	1	Joint	Passed the air test
105.7 ft.	D	1	Joint	Passed the air test
112.0 ft.	D	1	Joint	Passed the air test
117.9 ft.	D	1	Joint	Passed the air test
124.0 ft.	D	1	Joint	Passed the air test
131.4 ft.	D	1	Joint	Passed the air test
137.0 ft.	D	1	Joint	Passed the air test
143.0 ft.	D	1	Joint	Passed the air test
150.0 ft.	D	1	Joint	Passed the air test
155.2 ft.	D	1	Joint	Passed the air test
162.2 ft.	D	1	Joint	Passed the air test
167.5 ft.	D	1	Joint	Passed the air test
173.1 ft.	D	1	Joint	Passed the air test
180.4 ft.	D	1	Joint	Passed the air test
185.3 ft.	D	1	Joint	Passed the air test
191.5 ft.	D	1	Joint	Passed the air test
198.4 ft.	D	1	Joint	Passed the air test
204.4 ft.	D	1	Joint	Passed the air test
210.5 ft.	D	1	Joint	Passed the air test
216.4 ft.	D	1	Joint	Passed the air test
222.3 ft.	D	1	Joint	Passed the air test
227.9 ft.	D	1	Joint	Passed the air test
***************************************			*	

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments	
234.0 ft.	D	1	Joint	Passed the air test			
240.6 ft.	D	I	Joint	Passed the air test			
242.1 ft.	D	1	Joint	Passed the air test			
248.5 ft.	D	1	Joint	Passed the air test			
254.7 ft.	D	1	Joint	Passed the air test			
261.0 ft.	D	1	Joint	Passed the air test			
267.2 ft.	D	1	Joint	Passed the air test			
275.4 ft.	D	1	Joint	Passed the air test	•	· · · · · · · · · · · · · · · · · · ·	
279.6 ft.	D	1	Joint	Passed the air test			
285.9 ft.	D	1	Joint	Passed the air test			
291.9 ft.	D	1	Joint	Passed the air test	100		
297.3 ft.	D	1	Inspection	End			
297.7 ft.	D	1	Joint	Passed the air test			

Mainline ID: City: Address: Project name:

RUMSON SHREWSBURY RUMSON NJ

DR 84 TO 83

Start date/time: Asset length:

8/10/2021 11:36 AM

Upstream node:

84

Pipe shape:

Circular Comments:

328.0 ft.

Depth US:

Pipe material:

Clay ESVP

SHREWSBURY DR

Downstream node:

Weather:

Pipe height:

12.0 in.

Dry

83

8/9/21 RUMSON OSPREY LN GROUTING DVD 2

Operator:

John Read

Depth DS:

Pipe width:

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity F	Rating	Comments	
297.7 ft.	D	1	Inspection.				
303.9 ft.	D	1	Joint	Passed the air test			
310.4 ft.	D	1	Joint	Passed the air test			
316.3 ft.	D	1	Joint	Passed the air test			
322.2 ft.	D	I	Joint	Passed the air test			
323.7 ft.	D	1	Inspection	End			

Mainline ID:

City:

Address:

Project name:

RUMSON SHREWSBURY

DR 82 TO 76

RUMSON NJ

SHREWSBURY DR

8/9/21 RUMSON OSPREY

LN DVD 2

Start date/time:

Asset length:

Weather:

Operator:

8/10/2021 1:18 PM Upstream node:

381.6 ft.

Dry

John Read

Depth US:

Downstream node:

Depth DS:

82

Pipe shape:

Pipe material:

76

Pipe height:

Circular

Clay ESVP

12.0 in.

Pipe width:

Comments:

Observations

Distance	Dir. Length	From/To	Code	Modifier/Severity	Rating	Comments
153.6 ft.	D	1	Joint	Is Now Sealed		3 GALLONS
169.7 ft.	D	1	Inspection	End		
171.8 ft.	D	10 /	Lateral Defects	Is Now Sealed		3 GALLONS

Project name:

Mainline ID:

RUMSON SHREWSBURY

City:

Address:

8/9/21 RUMSON OSPREY LN DVD 2

RUMSON NJ

SHREWSBURY DR

Start date/time:

Direction:

Weather:

Surface condition:

8/9/2021 10:36 AM

With the flow

DR 85 TO 84

Pipe shape:

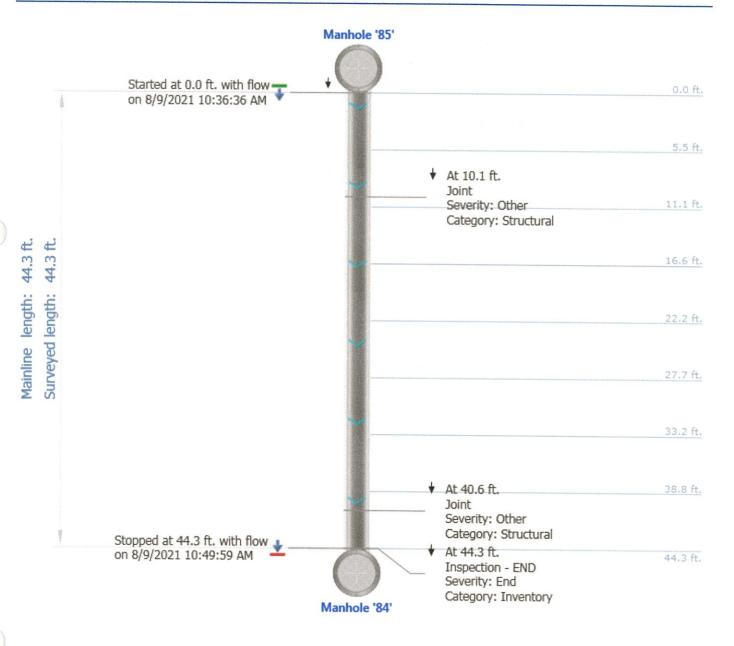
Pipe material:

Dry Pipe height: **Asphalt** Pipe width:

Circular

Clay ESVP

12.0 in.



Project name:

8/9/21 RUMSON OSPREY LN DVD 2

Start date/time:

8/9/2021 10:51 AM

Pipe shape: Circular

Mainline ID:

RUMSON SHREWSBURY

DR 84 TO 83

Direction:

With the flow

Pipe material:

Clay ESVP

City:

RUMSON NJ

Weather:

Dry

Pipe height:

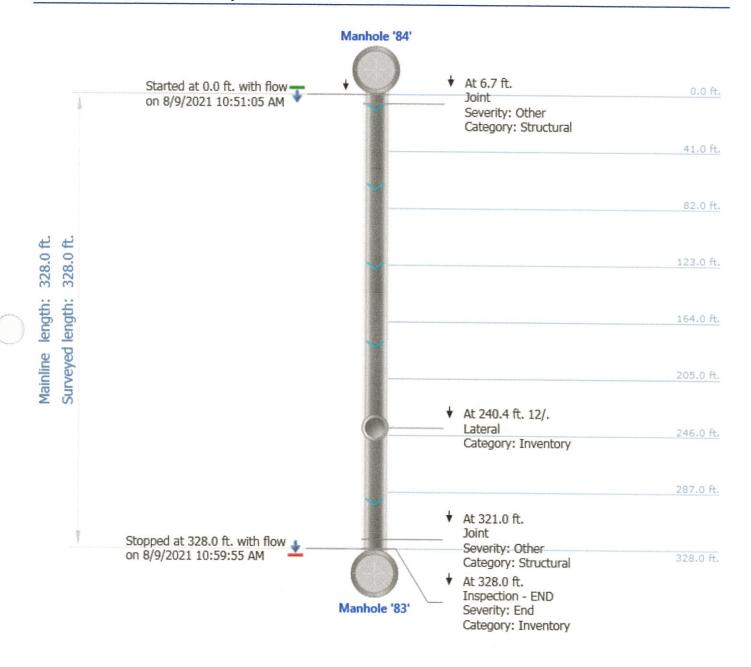
12.0 in.

Address:

SHREWSBURY DR

Surface condition:

Asphalt



Project name:

8/9/21 RUMSON OSPREY LN DVD 2

Start date/time:

8/9/2021 11:00 AM

Pipe shape:

Circular

Mainline ID:

RUMSON SHREWSBURY

DR 83 TO 82

Direction:

With the flow

Pipe material:

Clay ESVP

City:

RUMSON NJ

Weather:

Dry

Pipe height:

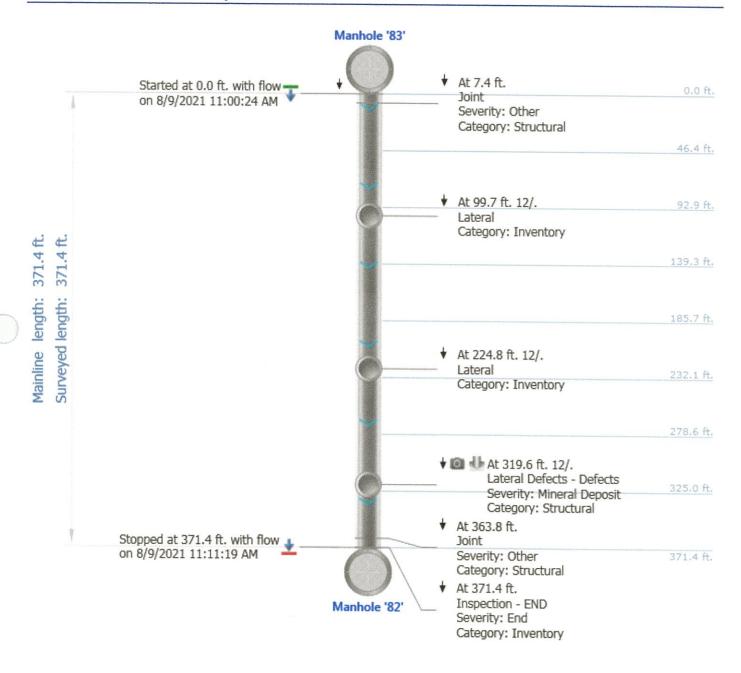
12.0 in.

Address:

SHREWSBURY DR

Surface condition:

Asphalt



Project name:

8/9/21 RUMSON OSPREY LN DVD 2

Start date/time:

8/9/2021 2:11 PM

Pipe shape:

Circular

Mainline ID:

RUMSON SHREWSBURY

DR 82 TO 76

Direction:

With the flow

Pipe material:

Clay ESVP

City:

RUMSON NJ

Weather:

Dry

Pipe height:

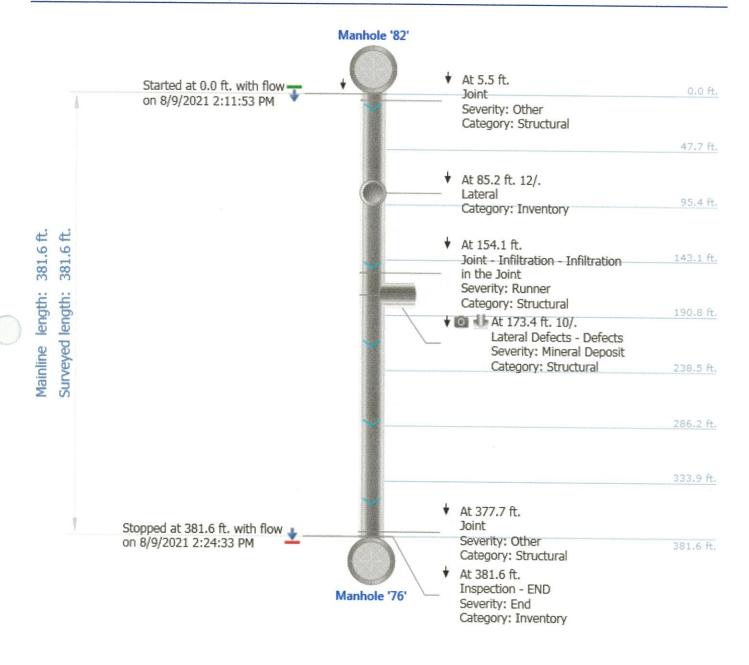
12.0 in.

Address:

SHREWSBURY DR

Surface condition:

Asphalt



Project name:

8/9/21 RUMSON OSPREY LN DVD 2

Start date/time:

8/9/2021 2:26 PM

Pipe shape:

Circular

Mainline ID:

RUMSON SHREWSBURY DR 76 TO PUMP STAT.

Direction:

With the flow

Pipe material:

Clay ESVP

City:

RUMSON NJ

Weather:

Dry

Pipe height:

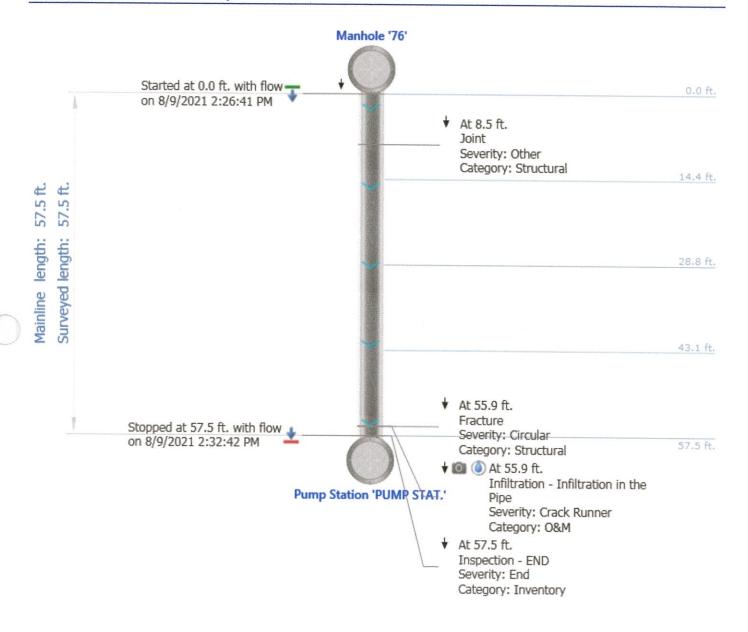
12.0 in.

Address:

SHREWSBURY DR

Surface condition:

Asphalt



Oswald ENTERPRISES, INC.

YELLOW BROOK PROPERTY COMPANY 247 BRIDGE AVENUE RED BANK, NEW JERSEY 07701

DVD 3
T.V. INSPECTION AND CHEMICAL GROUTING
OF VARIOUS SANITARY SEWER LINES
OSPREY LANE, RUMSON

AUGUST 11, 2021

OSWALD ENTERPRISES, INC. 161 EAST ROAD - P.O. BOX 126 BELFORD, NEW JERSEY 07718

Main Office: 161 East Road, P.O. Box 126, Belford, New Jersey 07718 Phone: 732-787-1436 • Fax: 732-495-4990 www.OswaldEnt.com

YELLOW BROOK PROPERTY COMP. 247 BRIDGE AVE RED BANK NJ 07701

Main Inspections Small Photos

Mainline ID:

City:

Address:

Project name:

RUMSON OSPREY LN 90 TO 89

RUMSON NJ

OSPREY LN

8/11/21 RUMSON OSPREY LN DVD 3

Start date/time:

Asset length:

Weather:

Operator:

8/11/2021 7:00 AM

202.4 ft.

Dry

John Read

Upstream node:

Depth US:

Downstream node:

Depth DS:

90

Pipe shape:

Pipe material:

89 Pipe height:

Pipe width:

Circular

Clay ESVP

8.0 in.

Comments:

Observations

-				OL	DSCIVATIONS
Distance		r. Length	From/To	Code	Modifier/Severity Rating Comments
4.7 ft.	D		1	Joint	Modifier/Severity Rating Comments Other
5.5 ft.	D		9 /	Lateral	Capped
6.4 ft.	D		1	Joint	Other
11.2 ft.	D		1	Joint	Other
26.8 ft.	D	1.3 ft.	1	Crack Joint	Longitudinal
41.8 ft.	D	1.5 ft.	I	Crack Joint	Multiple
47.0 ft.	D	1.3 ft.	12 /	Crack Joint	Longitudinal
57.1 ft.	D	1.7 ft.	9 /	Crack Joint	Longitudinal
62.2 ft.	D	1.9 ft.	3 /	Crack Joint	Longitudinal
72.8 ft.	D	1.4 ft.	4 /	Crack Joint	Longitudinal
8.5 ft.	D	1.3 ft.	9 /	Crack Joint	Longitudinal
03.8 ft.	D	1.2 ft.	12 /	Crack Joint	Longitudinal

Observations

Distance	Dir.	Length	From/To	Code	M 100 100			
140.1 ft.		<u> </u>	1	Joint - Infiltration	Modifier/Severity Weeper	Rating	Comments	
140.5 ft.	D		9 /	Lateral	Running Water			
146.7 ft.	D	1.2 ft.	5 /	Crack Joint	Longitudinal			
198.8 ft.	D		1	Joint	Other			
202.4 ft.	D		1	Inspection	End			

Mainline ID:

City:

Address:

Project name:

RUMSON OSPREY LN 90 RUMSON NJ TO 89

OSPREY LN

8/11/21 RUMSON OSPREY

Start date/time:

Asset length:

Weather:

LN GROUTING DVD 3 Operator:

8/11/2021 8:03 AM Upstream node:

202.4 ft.

John Read

90

Depth US:

Downstream node:

Depth DS:

Pipe shape:

Pipe material:

89

Pipe height:

Dry

Pipe width:

Circular

Clay ESVP

8.0 in.

Comments:

Observations

Distance	ce Dir. Length	From/	To Code	Maria	
4.7 ft.	D	1	Joint	Modifier/Severity Passed the air test	Rating Comments
C 4 54				r assed the air test	
6.4 ft.	D	1	Joint	Passed the air test	
11.2 ft.	D	1	Joint	Passed the air test	
17.1 ft.	D	1	Joint	Passed the air test	
23.7 ft.	D	1	Joint	Passed the air test	
27.0 ft.	D	1	Crack Joint	Is Now Sealed	2 GALLONS
32.0 ft.	D	I	Joint	Passed the air test	
37.2 ft.	D	1	Joint	Passed the air test	
42.2 ft.	D	1	Crack Joint	Is Now Sealed	3 GALLONS
48.1 ft.	D	1	Crack Joint	Is Now Sealed	1 GALLON
52.4 ft.	D	1	Joint	Passed the air test	
57.6 ft.	D	1	Crack Joint	Is Now Sealed	2 GALLONS
33.1 ft.	D	1	Crack Joint	Is Now Sealed	1 GALLON
88.9 ft.	D	1	Joint	Is Now Sealed	1 GALLONS
4.5 ft.	D	1	Crack Joint	Is Now Sealed	1 GALLON

Observations

			ODS	servations	
Distanc	95	r From,	/To Code	Modifier/Severity	Pating Co.
78.1 ft.	D	1	Joint	Passed the air test	Rating Comments
83.3 ft.	D	1	Joint	Passed the air test	
88.5 ft.	D	1	Joint	Passed the air test	
94.5 ft.	D	1	Joint	Passed the air test	
99.9 ft.	D	1	Crack Joint	Is Now Sealed	1 GALLON
104.3 ft	. D	1	Crack Joint	is Now Sealed	1 GALLON
109.2 ft.	. D	1	Joint	Passed the air test	
114.4 ft.	. D	1	Joint	Passed the air test	
120.7 ft.	D	1	Joint	Passed the air test	
125.5 ft.	D	1	Joint	Repaired from outside	
130.0 ft.	D	1	Joint	Passed the air test	
134.8 ft.	D	1	Joint	Is Now Sealed	1 GALLON
140.3 ft.	D	1	Joint	Is Now Sealed	1 GALLON
142.1 ft.	D	1	Joint	Passed the air test	
47.4 ft.	D	1	Joint	Passed the air test	
52.4 ft.	D	1	Joint	Passed the air test	
58.0 ft.	D	1	Joint	Passed the air test	
62.6 ft.	D	1	Joint	Passed the air test	
67.7 ft.	D	1	Joint	Passed the air test	
72.8 ft.	D	1	Joint	Passed the air test	
78.5 ft.	D	1	Joint	Passed the air test	

Observations

Distance	Dir. Length	From/T	o Code	Modifica (Same		Minkson, and
183.7 ft.	D	1	Joint	Modifier/Severity Passed the air test	Rating	Comments
188.3 ft.	D	I	Joint	Passed the air test		
193.3 ft.	D	1	Joint	Passed the air test		
198.9 ft.	D	1	Joint	Passed the air test		
198.9 ft.	D	1	Inspection	End		

Mainline ID:

City:

Address:

Project name:

RUMSON SHREWSBURY DR 83 TO 82

RUMSON NJ

SHREWSBURY DR

Start date/time:

Weather:

8/11/21 RUMSON OSPREY LN DVD 3

8/11/2021 10:14 AM

Asset length: 368.1 ft.

Operator:

Upstream node:

Depth US:

Downstream node:

John Read

83

Pipe shape:

Pipe material:

82

Dry

Depth DS:

Circular

Clay ESVP

Pipe height:

Pipe width:

Comments:

12.0 in.

Observations

Distance	istance Dir. Length From/To Code		M In the	No. of the last of		
99.0 ft.	D	12 /	Lateral	Modifier/Severity	Rating	Comments
223.2 ft.	D	12 /	Lateral			
317.1 ft.	D	12 /	Lateral Defects	Mineral Deposit	-	
368.1 ft.	D	1	Inspection	End		

Mainline ID:

City:

Address:

Weather:

Project name:

RUMSON SHREWSBURY RUMSON NJ DR 82 TO 76

SHREWSBURY DR

8/11/21 RUMSON OSPREY LN DVD 3

Start date/time:

Asset length:

8/11/2021 10:30 AM Upstream node:

381.6 ft.

Operator: John Read

82

Depth US:

Downstream node:

Pipe shape:

Pipe material:

76

Dry

Depth DS:

Circular

Pipe height:

Pipe width:

Clay ESVP

12.0 in.

Comments:

Observations

Distance	Dir. Length	From/To	Code			
86.8 ft.	D	12 /	Lateral	Modifier/Severity	Rating	Comments
154.9 ft.	D	1	Grouted			
174.8 ft.	D	10 /	Lateral Defects	Mineral Deposit		
381.1 ft.	D	1	Inspection	End		

YELLOW BROOK PROPERTY COMP. 247 BRIDGE AVE RED BANK NJ 07701

Main Inspections Pipe Run

Project name:

Mainline ID:

RUMSON NJ

Address:

LN DVD 3

8/11/21 RUMSON OSPREY RUMSON OSPREY LN 90 **TO 89**

OSPREY LN

Start date/time:

Direction:

Weather:

8/11/2021 7:00 AM

With the flow

Surface condition:

Pipe shape:

Pipe material:

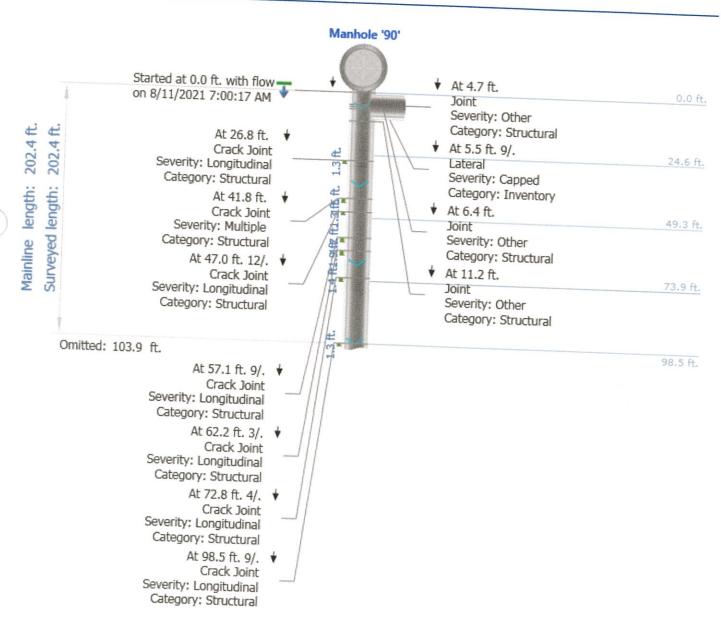
Dry Pipe height:

Asphalt

Circular

Clay ESVP

8.0 in.



Project name:

Mainline ID:

Start date/time: 8/11/21 RUMSON OSPREY RUMSON OSPREY LN 90 8/11/2021 7:00 AM

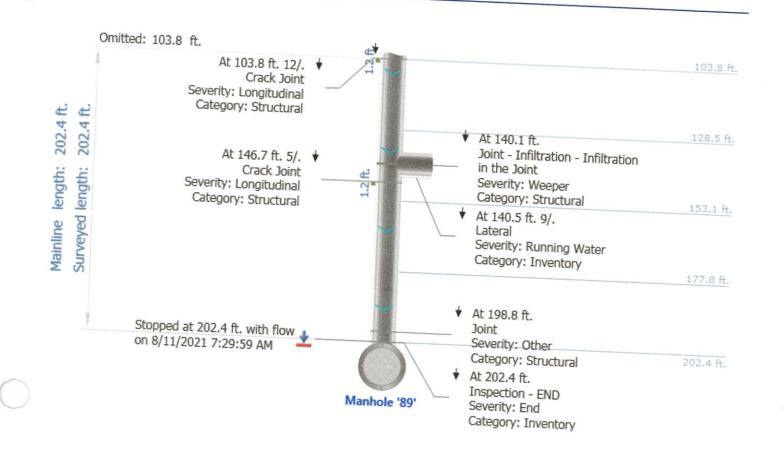
Direction:

Weather:

TO 89

With the flow





Project name:

Mainline ID:

Start date/time:

8/11/2021 10:14 AM

Pipe shape:

LN DVD 3

Circular

8/11/21 RUMSON OSPREY RUMSON SHREWSBURY DR 83 TO 82

Direction:

With the flow

City:

Weather:

Pipe height:

12.0 in.

Dry

RUMSON NJ

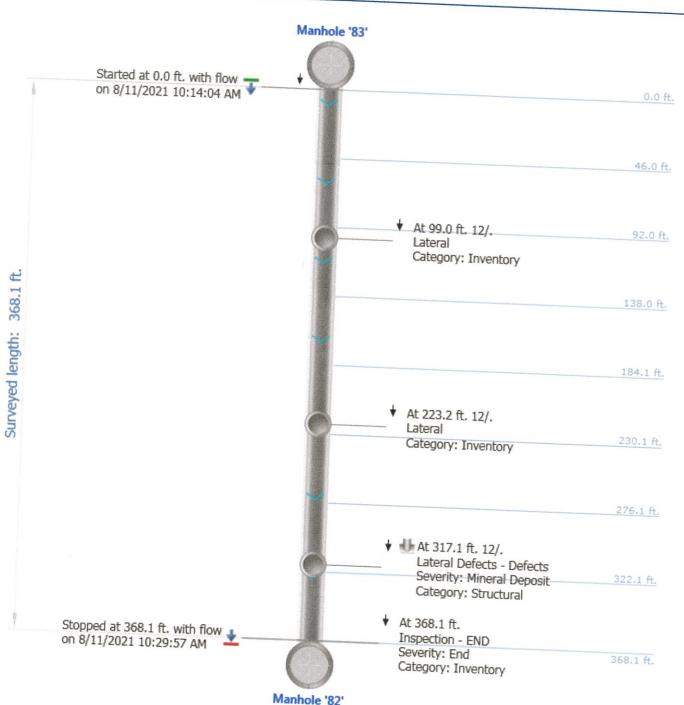
Address:

SHREWSBURY DR

Surface condition:

Asphalt





Project name:

8/11/21 RUMSON OSPREY RUMSON SHREWSBURY LN DVD 3

Start date/time:

8/11/2021 10:30 AM

Pipe shape:

Circular

Mainline ID:

DR 82 TO 76

Direction:

With the flow

Pipe material:

Clay ESVP

City:

RUMSON NJ

Weather:

Dry

Pipe height:

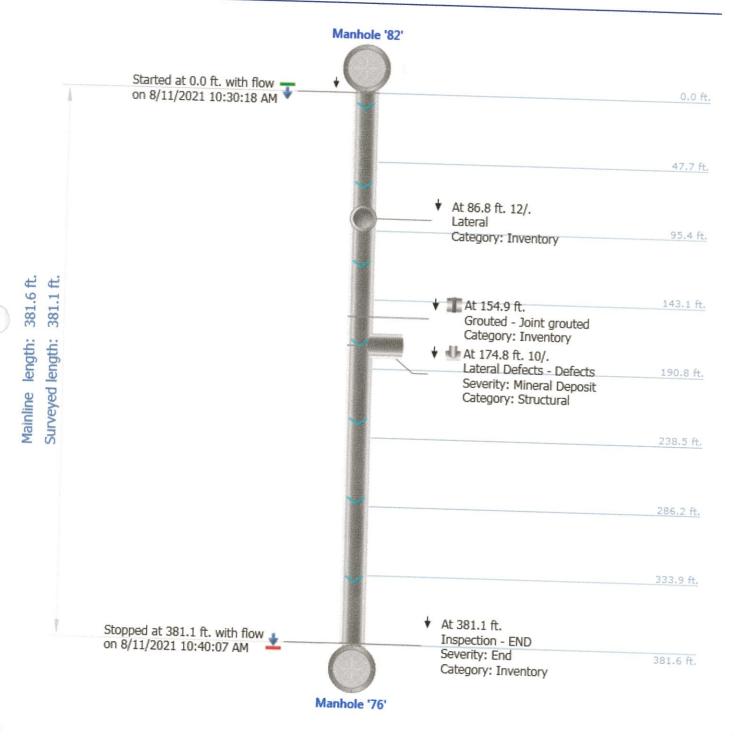
12.0 in.

Address:

SHREWSBURY DR

Surface condition:

Asphalt



APPENDIX B

Riverside Drive Pump Station Sewer Line Grouting Analysis & Project Findings April 2021

May 22, 2019	to	March 5, 2020	288	Days in Study Period
	Operational Hours	Approximate Gallons ¹	Gallons Per Day	
Pump #1	3,281	9,843,000	34,177	
Pump #2	3,204	9,612,000	33,375	
Total	6.485	19.455.000	67.552	

Analysis Period #2 - Post- Pipe Joint Test and Seal Program

May 22, 2020	to	March 5, 2021	287	Days in Study Period
	Operational Hours	Approximate Gallons ¹	Gallons Per Day	
Pump #1	912	2,736,000	9,500	
Pump #2	859	2,577,000	8,948	
				_
Total	1,771	5,313,000	18,448	

Test and Seal Program Results (Period 2 - Period 1)

Gallons Per
Approximate Gallons Gallons Per Day Day Per Linear

Operational Hours Approximate Gallons Gallons Per Day Day Per I

(4,714) (14,142,000) (49,275.26) (7.19)

Projected Annual Savings

Per 2018 Customer Town Bill from Au	<u>uthority</u>		
2017 Actual Flows		544,320,000	GPY
2018 Actual Charges	\$	1,645,592	
Cost per Gallon	\$	0.003023	
Projected Annual Savings ²	\$	42,754	-
Per 2019 Customer Town Bill from Au	<u>uthority</u>		
2018 Actual Flows		570,790,000	GPY
2019 Actual Charges	\$	1,793,308	
Cost per Gallon	\$	0.003142	
Projected Annual Savings ²	\$	44,431	-

Clean & TV inspection 2018	Ş	7,200.00	(portion of total \$35,200)
Test & seal all pipe joints 2020	\$	53,580.00	_
Total rehab cost:	\$	60,780.00	
Total Linear Footage		6,850	
Rehab cost per linear foot	\$	8.87	

Potential Rate of Return (using avg \$

savings) on Rehab Cost³ 1.17 Years

Analysis Notes:

- 1 Both pumps have minimum flowrates of 100 gallons per minute = 6,000 gallons per hour For analysis purposes, we assume a flowrate of 50 gpm = 3,000 gph
- 2 Does not include savings resulting from reduced electrical consumption, personnel hours, maintenance and repair costs, and equipment longevity factors.
- 3 Based on estimates of 50% flowrate and assumes similar annual rainfall, similar annual groundwater elevations, and no other system changes.